

RURAL MEXICO



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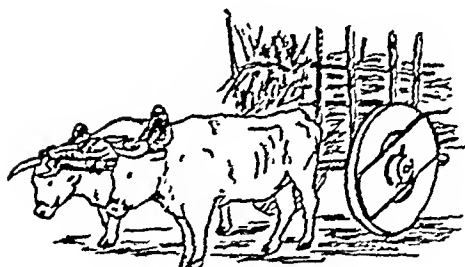
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WITH A FOREWORD BY

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Dedicated to

THEORA, REY, and JOHNO

In memory of three interesting years in Mexico

. . .

Dedicated also to

The memory of my father and mother

JOHN THOMAS WHETTEN

and

AGNES BELZORA SAVAGE WHETTEN

Pioneers in Northern Mexico

PREFACE

MY INTEREST in Mexico dates from early childhood. Born in northern Mexico of American parents and having spent most of my childhood there, I have often wanted to return as a student to see the land of my birth through the eyes of a sociologist. Short visits were made to Mexico in 1929, 1934, and 1939. The opportunity for extended study came in 1942, when I was chosen as one of three rural sociologists by the United States Department of State and the Office of Foreign Agricultural Relations to study and report on social conditions and developments in rural Latin America. The present work is an outgrowth of this experience. I served as rural sociologist attached to the United States Embassy in Mexico from 1942 to 1945. In this capacity I had the opportunity to travel throughout the country, visiting every state in the Republic and interviewing people in all walks of life. I am firmly convinced that good neighborly relations among nations must be based upon mutual understanding of one another's culture, social institutions, problems, and aspirations. To gain such understanding one must get past the diplomats and go to the people themselves. It seems particularly important at this time that the United States and Mexico understand each other. Mexico is the gateway to Latin America, and relations between these two countries will be closely watched by all other Latin-American countries. It is hoped that this book will contribute in a small way toward a more adequate understanding of Mexico. I shall be happy, indeed, if it also serves to assist Mexicans in more clearly thinking through some of their own problems.

This work is essentially a study in rural sociology. About two-thirds of Mexico's population makes its living from agriculture and at least another 10 per cent are engaged in rural arts and crafts. The industrial revolution is only beginning to take hold there, and, although industrialization appears to be the principal hope for economic development in the future, it will be many years before it absorbs any great proportion of Mexico's total population. The vast majority of the people will continue for a long time to live in small villages and to earn their living from the land, supplemented by work in rural arts and crafts; hence any treatise which proposes to interpret Mexico adequately must be heavily weighted in favor of the rural population.

Mexico City is an entirely different world from that with which most Mexicans are acquainted. To understand Mexico, one must leave the city and visit the isolated villages, where life goes on undisturbed by newspapers, telephones, highways, and radios.

Although the focus of this work is on rural Mexico, comparable data are presented in most cases for the urban areas and for the total population.

One cannot study rural Mexico without running into the Mexican Revolution. It is encountered on every hand. It is spelled with a capital *R* and is regarded as a *process* which began in 1910. It is still going on. The first ten years were devoted largely to armed conflict or civil war. Since 1920 the Revolution has encompassed policies and programs designed to bring about the alleged ideals for which the armed conflict was supposedly fought. These are not stated precisely but appear to include such programs as land for the landless, books and schools for the illiterate, individual freedom from tyranny and oppression, and democracy in government. Much of the study, therefore, is oriented around the general problem of trying to answer how well and to what extent the ideals of the Revolution are being put into effect. It attempts to throw light on the important question: To what extent may the Revolution be regarded as a success or a failure? The connecting thread of the Revolution is woven throughout almost the entire work.

The book is divided into five parts. Part I is devoted to an analysis of the population and the geographic environment. Part II is concerned with the relation of the people to the land. Since redistribution of land has been the cornerstone of the revolutionary program, it has seemed advisable to treat these relationships in considerable detail. A number of studies of the Mexican agrarian program have appeared in Spanish from time to time. The most recent of these is an important, though brief (80 pages), study which has just been published under the title *Del agrarismo a la revolución agrícola*, by Marco Antonio Durán. No thorough study of the agrarian program has appeared in English since Eyler N. Simpson's important book, *The Ejido: Mexico's Way Out*. Simpson's book was published in 1937, but it included data on the agrarian program only to December, 1933. By that time, 7,624,837 hectares of land had been redistributed to 754,577 peasants. Subsequent events have shown that this was but the beginning. By the end of 1945 a total of 30,619,321 hectares of land (about 76,000,000 acres) had been redistributed to 1,732,062 peasants. Part II of the

present work is devoted chiefly to an analysis of the agrarian program, including the redistribution of land, the organization of the ejido, and its place in Mexico's rural economy. In order to set the stage for this analysis a chapter is devoted to each of the two major systems of land tenure that prevailed prior to 1910—the landholding village and the hacienda.

Part III is concerned with standards and levels of living, including housing, diet, clothing, and health and mortality. Part IV is devoted to social institutions, such as the family, the school, the church, and government. One chapter is devoted to the Sinarquista movement. Part V contains one short chapter of conclusions concerning the accomplishments of the Revolution in relation to its avowed ideals.

Statistical data are taken largely from official sources. A national housing census was made in 1939; several other censuses were taken in 1940, including a population census, an agricultural and livestock census, and an ejido census. These censuses contain a wealth of information on Mexico, but tabulation of the data has been retarded, and complete results are not yet generally available. Many of these data will appear for the first time in this work. The Dirección General de Estadística has been most co-operative in giving me access to unpublished, and even untabulated, materials. Additional information was obtained from the records of the Banco Nacional de Crédito Ejidal, the Departamento Agrario, the Secretariat of Public Education, the Secretariat of Agriculture, and other agencies.

Census data in Latin America generally leave much to be desired from the standpoint of accuracy and completeness of enumeration. Many countries have not taken a population census for many years. Bolivia has not taken one since 1900, Uruguay not since 1908, Argentina not since 1914, while in Ecuador a census has never been taken. A few countries, however, have made commendable progress in this respect in recent years. Mexico is one of these. She has taken a census consistently each decade since 1900, and her methods of procedure are steadily improving. Her population census of 1940 is considered by demographers of the United States Bureau of the Census as being one of the most complete and reliable of any recent census in Latin-American countries. There are defects of underenumeration, especially in the more isolated rural districts and among the youngest age groups; but, on the whole, the data are quite usable, since one knows where to make allowances. Mexican vital statistics are also reasonably reliable in so far as gross numbers are concerned. They are inadequate

in the more isolated districts, however, and in some cases there are fluctuations among areas which can be explained only by assuming variations in the completeness of registrations. In the use of statistical materials throughout this work I have avoided the more questionable materials and have tried to point out possible defects in the data used whenever it seemed that they might be sufficiently serious to affect the results.

It is impossible to mention the names of all those who have contributed in one way or another to the success of this project. I am grateful to the Department of State and the Office of Foreign Agricultural Relations for honoring me with an assignment to Mexico. I feel especially indebted to L. A. Wheeler, Ross E. Moore, and Ralph Allee. Carl C. Taylor first mentioned the project to me, and we exchanged ideas frequently as to what types of studies were most needed in Latin America. George S. Messersmith, who was then the United States ambassador to Mexico, was helpful, as were Lester D. Mallory, agricultural attaché, and all other staff members connected with the attaché's office. I am indebted to Albert N. Jorgensen, president of the University of Connecticut, who granted me a leave of absence from the university for three years in order that I might cooperate in the Latin-American program. He also encouraged me to finish the study after my return to the university in October, 1945. My appreciation is expressed to Dr. Manuel Gamio of Mexico, distinguished anthropologist and sociologist, whose friendly advice was always helpful and who read the manuscript and offered helpful suggestions.

Finally, I owe a debt of deep gratitude to my many other Mexican friends, who courteously and generously co-operated by placing at my disposal their time, their knowledge, and their personal experiences and who invited me to inquire into the defects, as well as the achievements, of the various programs. They received me as one of them. They discussed their problems freely and frankly with me. In some cases they made special tabulations of data for my use which probably never will be published elsewhere. Without their assistance and co-operation this study could never have been made. I shall not attempt to mention them by name, since this work deals with their country and I have no wish to involve them, even by implication, in any responsibility for the conclusions presented. Their courtesy and generosity will be remembered always.

While various individuals and governmental agencies, in both the

United States and Mexico, co-operated in facilitating the studies during my stay in Mexico, they are in no way responsible for any of the statements or conclusions contained in this work. *I, alone, am responsible.*

It is perhaps inevitable that in a book such as this, which deals with many important aspects of human society, some errors, whether of fact or of interpretation, may have crept in. I shall be happy if the errors are few.

N. L. W.

STORRS, CONNECTICUT
April 1947

FOREWORD

THE task of writing an introduction to a book such as this which contains irrefutable documentation and in all good faith presents bitter truths concerning some of the enormous social problems that face Mexico, yet at the same time offers hope for the future and sensible suggestions concerning some of these problems, might be an unwelcome task to those Mexicans who are sentimentally biased; but to those who love and regard their country in a broader perspective, this is not only a welcome task but a patriotic one because a great country can be forged only by a vigorous and resolute hammering on the anvil of Truth, not by self-deception through biased optimism or indulgence in useless lamentation.

This book is a scholarly work. It uses a sociological approach and represents a tremendous amount of careful research. It is an important contribution to the literature on Mexico and should be read by Mexicans interested in the welfare of their country, as well as by foreigners wishing to understand Mexico. One may or may not agree with all the conclusions and interpretations. Even if the book should contain a few errors which have escaped our attention and which may have been overlooked by the author, it is well that they are set forth here in order that they may be corrected.

On the other hand, conclusions by scholars concerning national problems of their own countries often suffer from inevitable omissions and involuntary reservations. Accustomed as they are to observing such problems at close range, they cannot always perceive and interpret properly some of their aspects and manifestations as can neutral and honest observers from the outside, who, not being involved in the situations they study, may view them in broader perspective from more detached points of view. Such is the case of the author of this work, the competent sociologist, Nathan L. Whetten, who holds a Ph.D. from Harvard University and who is a man of utmost integrity. He was born in Mexico and lived here during his childhood. For this reason he feels a sincere and disinterested affection for this country. He has resided here for three years, completely devoted to the study of the conditions under which our Mexican population, especially our rural population, is developing.

Since the reader will probably desire that the Foreword to this

book contain, by way of supplement, a statement of our point of view concerning some of the important points treated by Dr. Whetten, we present it now even though it must, of necessity, be very sketchy.

Great political and social changes have been taking place recently in various countries of Latin America. Witness the most recent examples in Venezuela, Guatemala, Peru, and lately in Brazil. These countries are trying to improve the economic and cultural conditions among those segments of the population that have a low level of living, both materially and intellectually. They are trying to set up truly democratic regimes, eliminating backward and corrupt administrations, and they are endeavoring to promote intelligent and active international co-operation. But we must ask: Will the new democratic organization of these countries work out in the manner intended? Is it based on, and justified by, scientific knowledge of what preceded in the social organization of these peoples? Will it provide adequately for their social needs and aspirations? Will there arise sooner or later reactionary movements or harmful disorientations, or will the new legislation die on the books unheeded? The best way to test the significance of these questions on the basis of experience is to analyze the case of Mexico, a typically representative American country, where a great number of social movements and revolutionary conquests have been taking place.

Large numbers of men of good faith—some humble, others eminent—gladly shed their blood in order to create a better Mexico, and the entire population has made cruel sacrifices for the same purpose. Many of the greater needs and just aspirations of the people, however, have not yet been satisfied. This is not logical, in view of the fact that the prolonged revolutionary transformation, which began in 1910 and which has not yet ended, was aimed precisely at these humanitarian goals. What is the reason for the difficulties that Mexico is experiencing, evidence of which is not to be found in its huge, very modern, and contrasting capital city but rather in the miserable and poverty-stricken mode of living which is prevalent among millions of Mexicans, especially in the rural areas?

Two internal factors are chiefly responsible for this situation. First and uppermost is the geographical factor. Many of its effects have been perennially adverse, but this factor cannot be changed or eliminated, although some of its influences can be modified favorably. The second is the human factor. On its proper or inefficient functioning depends the success or failure of our social development and the wisdom with which our biogeographical resources are utilized.

THE GEOGRAPHIC FACTOR

Among the many ways in which the geographic factor acts upon and influences the life of the Mexican people, we may choose as the most important example the one relative to agricultural production, which is the immediate basis of Mexico's economy.

The just agrarian laws of Mexico have furnished ejido lands to millions of Mexican peasants, with the generous hope that their use might make it possible to improve their economy, to raise their standards of living, and to help them obtain legitimate satisfactions which they have never before enjoyed. But nature—the geography of the country—has been unalterably set against this purpose, not only against the present-day ejidatarios but also against the humble small landholders as well as the large plantation owners of all times. The mountainous nature of the country makes cultivation of more than half the land impossible. It isolates the small population groups from one another. It makes economically impossible the construction of the many and costly roads necessary to furnish adequate intercommunication. Lands that have regular and sufficient rainfall or are artificially irrigated are very scarce in the highlands. The tropical lands which have sufficient moisture are very fertile, but the presence of tropical diseases results in their being sparsely settled and, consequently, in their having low agricultural productivity. The remaining lands, which occupy an enormous expanse, are semidesert or desert and consequently produce little or nothing.

If for these and other complementary reasons the agricultural and livestock production is often insufficient to take care of the normal subsistence needs of the present population, what will happen in the future, if the population continues to increase as rapidly as the demographic increase of the last quarter of a century leads one to expect? It is not possible to distribute rainfall in regular periods and in sufficient quantities over all the territory; neither is it possible to create level lands or fertile gardens where only mountains or deserts impossible to irrigate exist. It is possible, however, to do what other countries are doing where nature offers just as numerous and difficult obstacles as those that characterize the Mexican land: increase greatly the amount of artificial irrigation; develop more systematic and adequate methods of cultivation; promote selective livestock breeding; counteract soil erosion; develop programs of sanitation; gradually colonize the tropical lands. Actually, some of these activities have already been broached and partly developed, but the prob-

lem is of such magnitude that it is absolutely necessary to continue them, to generalize them, and to enforce them in a more extensive and intensive way than heretofore.

THE HUMAN FACTOR

The relatively integral homogeneity of a population seems to be one of the most determining factors for its normal and favorable development, as may be illustrated by the cases of Finland, Sweden, and other countries. On the other hand, social development seems to be hindered by marked cultural, economic, linguistic, and racial heterogeneity, such as is found in Mexico. The numerous social groups that form the national population live in different stages of social evolution, beginning with the lowest primitive and nomadic groups that live in very isolated rural regions, whose mode of living is more or less analogous to what was characteristic thousands of years ago. Passing through several intermediate and successively rising stages, we reach the top, or most modern, stage, which includes certain urban minorities.

In the groups at the lowest stage, race, culture, and language are of an autochthonous type, and their needs, aspirations, and ideals are more or less faithful survivals of those that existed in pre-Columbian times. These groups differ in almost all respects from the social minorities of the higher stage because in this category members of the white race, and to a lesser extent the mestizos, predominate. Their culture is of Occidental origin and their language Spanish; their needs, aspirations, and ideals are modern. Consequently, the ideas that the primitive groups have of themselves and of the world that surrounds them are quite different from, and even opposed to, those of the aforementioned minorities. In the intermediate groups these differences are slowly decreasing, in proportion to the degree of social evolution which the groups have experienced and in accordance with the amount and types of social interaction that have taken place among the component elements of these groups.

We are of the opinion that what we have already stated concerning the social heterogeneity which characterizes Mexico and, in general, the countries of Indo-Iberian structure explains to a large extent the difficulties that the people have met and are still meeting in their attempts at unification and their efforts to develop in a truly democratic fashion.

Now we turn to a very brief examination of the laws that have prevailed in Mexico from the sixteenth century until now. During colonial

times legislation was, in principle, more logical and comprehensive than it became later, since it considered jointly the needs of the Indians and the Spaniards; but, in reality, it was interpreted exclusively in favor of the latter. Independence brought about the elaboration of laws which were theoretically advanced and democratic but which at the same time were so exotic and inadequate that, for example, in the case of Mexico, they do not even mention, per chance as an exception, the aboriginal social elements. They assume that their needs and aspirations, as well as the legal means to satisfy them, are the same as those of the European element, regardless of the fact that there is a great difference between the two in essence and substance. Consequently, Indian and great numbers of mestizos were left in the same or worse condition because the new legislation copied to a large extent from that created by and for foreign peoples was able to accomplish little or nothing in their behalf, while it favored particularly the European minority, which inherited and continued the colonial system which had preserved the ruling classes that retained power and wealth.

so prevalent in Mexico, principally among the Indo-mestizo population. Generally, these unions are as respectable as the legal and religious marriages, but they are not legalized either because of economic considerations or because the Indians consider their unions consecrated by traditional rites of pre-Hispanic origin and feel no need to have them legalized. These free unions still create serious difficulties for the offspring, especially in matters of succession.

Another defect of the Constitution of 1917 is that it did not attempt to correct the illogical and inefficient geographicopolitical divisions of the Republic, with the result that a state like Tlaxcala, of small size geographically, with high density of population, with scanty material resources, and with a predominantly aboriginal population, stands in sharp contrast to states like Veracruz, whose land surface is considerably larger, density of population less, and natural resources very plentiful. This accounts for the fact that living conditions among the inhabitants of the former state have always been poor, whereas those of the inhabitants of the latter are, in comparison, very much more attractive.

If the present laws of Mexico were interpreted according to the principles and conclusions of the social sciences, taking as a basis studies as methodical and comprehensive as this one of Dr. Whetten's, and if they were applied with total integrity and prudent energy, all, instead of only a few, of the social groups that form the national population would evolve efficiently.

EXTERNAL INFLUENCES

We have dealt thus far with the principal internal influences which, through geographical and human factors, have retarded the social evolution of the Mexican people. Now we should like to refer to the external influences that have moved in the same direction.

The aforementioned adverse conditions—heterogeneity of population, poor economic situation, low cultural standards, and lack of means of defense—gave rise, after Independence, to the immigration of population elements from other countries who were better prepared, more industrious, and more ambitious than the Mexicans. These immigrants took possession gradually and easily of the principal sources of wealth of the country, relying always on the ready and often arbitrary protection of their respective governments, bringing about an era of numerous incidents of imperialism which threw Mexico back to the status of an economic colony and gave unconditional support to oligarchies that successfully governed it. As an ex-

ample of these situations, we may recall, in the last century, the fatal and bloody French intervention and the short-lived imposition of the pretended empire of Maximilian of Austria.

This policy of imperialism and the geographical proximity of a country as powerful as the United States unfortunately account for the fact that during the last century Mexico lost more than half her territory and, with it, important agricultural resources, as well as rich and varied mineral deposits. Fortunately, the enactment of the Good Neighbor Policy has changed the outlook for the better, and it is to be hoped that the ideals of true democracy and strict international justice which the postwar world holds dear will serve progressively to curtail, if not completely to eradicate, adverse influences on Mexico from the outside.

These are a few of the many problems which this important book stimulates us to reflect upon. In order that the various American countries may co-operate intelligently, it is first essential that their culture, their social institutions, and their problems be thoroughly understood. Dr. Whetten has produced a monumental work. It is basic to an understanding of Mexico, her people, and her problems.

MANUEL GAMIO

MEXICO CITY
November 1946

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

xxiii

PART I. THE PEOPLE OF MEXICO AND THEIR GEOGRAPHICAL ENVIRONMENT

I. THE GEOGRAPHICAL ENVIRONMENT	3
II. GROWTH AND DISTRIBUTION OF THE POPULATION	21
III. THE COMPOSITION OF THE POPULATION	59

PART II. THE RELATION OF THE PEOPLE TO THE LAND

IV. THE LANDHOLDING VILLAGE (PRIOR TO 1910)	75
V. THE HACIENDA (PRIOR TO 1910)	99
VI. AGRARIAN ASPECTS OF THE REVOLUTION	103
VII. THE REDISTRIBUTION OF LAND	124
VIII. COLONIZATION AND THE DEVELOPMENT OF THE SMALL PRIVATE HOLDING	152
IX. THE EJIDO SYSTEM	152
X. COLLECTIVE FARMING: A CASE DESCRIPTION OF THE LAGUNA PE- GION	215
XI. THE PLACE OF THE EJIDO IN THE RURAL ECONOMY	249

PART III. STANDARDS AND LEVELS OF LIVING

XII. HOUSING	225
XIII. DIET AND CLOTHING	234
XIV. HEALTH AND MORTALITY	228
XV. INDIANISM IN RELATION TO STANDARDS OF LIVING	255

PART IV. SOCIAL INSTITUTIONS

XVI. MARRIAGE AND THE FAMILY	275
XVII. EDUCATION AND THE RURAL SCHOOLS	401
XVIII. RURAL CULTURAL MOVEMENTS	402
XIX. RELIGION AND THE RURAL CHURCH	454
XX. THE SINARQUISTA MOVEMENT	454
XXI. GOVERNMENT	522

APPENDIXES

A. STATISTICAL TABLES	575
B. ARTICLE 27 OF THE POLITICAL CONSTITUTION OF THE UNITED MEXICAN STATES AS REVISED TO APRIL 1, 1947	616

BIBLIOGRAPHY

BIBLIOGRAPHY	625
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INDEX

INDEX	647
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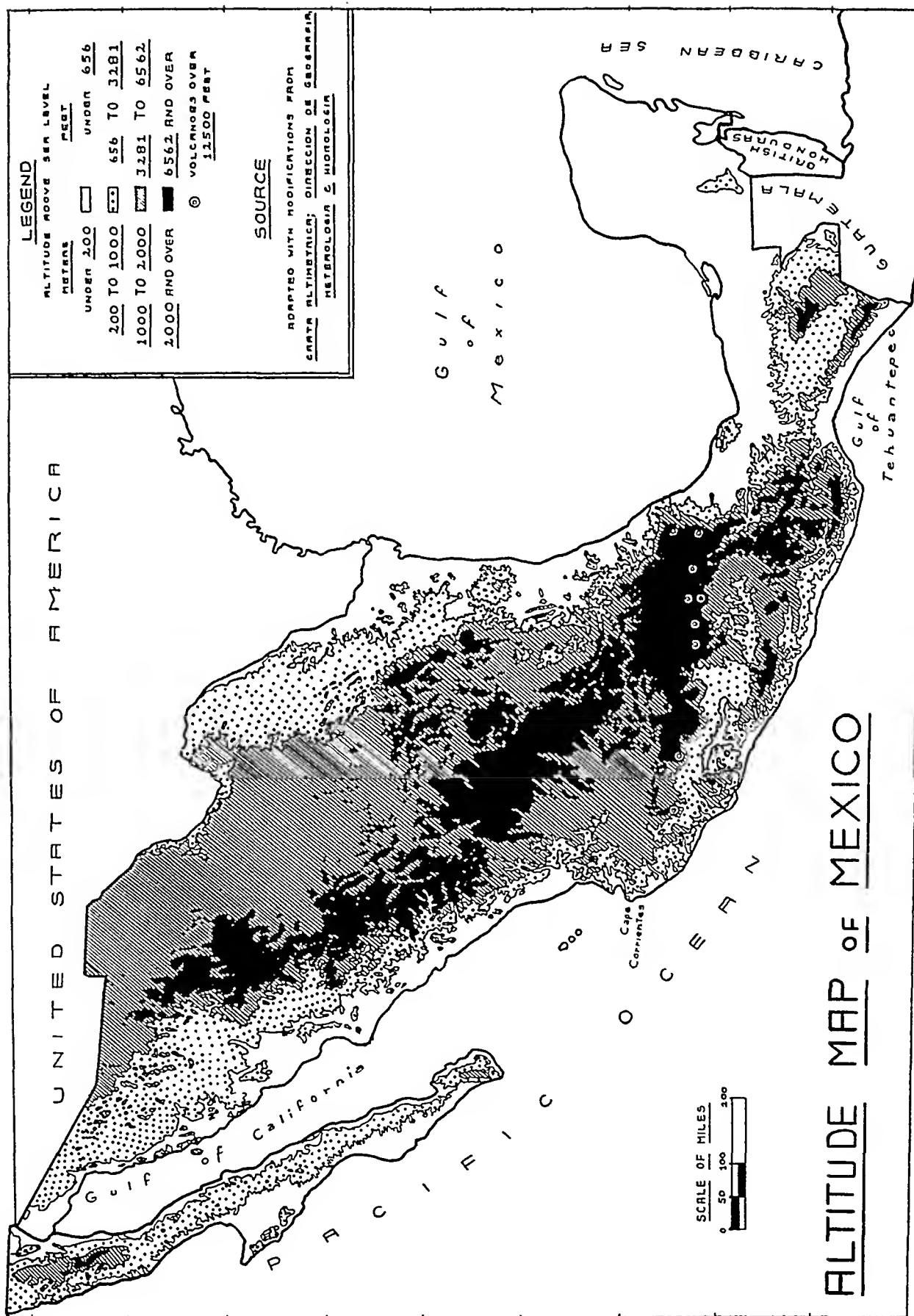
LIST OF ILLUSTRATIONS

MAPS AND CHARTS

1. RELIEF MAP OF MEXICO	<i>facing</i> 3
2. ALTITUDE MAP OF MEXICO	5
3. RAINFALL MAP OF MEXICO	7
4. LAND UTILIZATION IN MEXICO	9
5. NATURAL REGIONS OF MEXICO	11
6. STATISTICAL REGIONS OF MEXICO	19
7. GEOGRAPHICAL DISTRIBUTION OF MEXICO'S POPULATION	29
8. DENSITY OF POPULATION IN MEXICO, BY MINOR CIVIL DIVISIONS	31
9. PROPORTION OF MEXICO'S POPULATION LIVING IN RURAL COMMUNITIES WITH LESS THAN 2,500 INHABITANTS, BY STATES	35
10. PROPORTION OF MEXICO'S GAINFULLY EMPLOYED POPULATION ENGAGED IN AGRICULTURE, BY STATES	37
11. INHABITANTS OF MEXICO CLASSIFIED ACCORDING TO SIZE OF COMMUNITY IN WHICH THEY LIVE	45
12. PERCENTAGE OF MEXICO'S POPULATION FIVE YEARS OF AGE AND OVER, SPEAKING INDIAN LANGUAGES, BY MINOR CIVIL DIVISIONS	57
13. PERCENTAGE OF MEXICO'S TOTAL POPULATION RESIDING IN THE STATE OF BIRTH IN 1940	58
14. PERCENTAGE OF MEXICO'S GAINFULLY EMPLOYED FOUND IN THE VARIOUS OCCUPATIONAL GROUPS INDICATED	63
15. POPULATION PYRAMIDS, SHOWING AGE AND SEX COMPOSITION OF POPULATION IN MEXICO AND THE UNITED STATES	68
16. NUMBER OF HECTARES OF LAND DISTRIBUTED AND NUMBER OF PERSONS RECEIVING LAND UNDER THE AGRARIAN PROGRAM, 1915-45, BY YEARS	126
17. LAND DISTRIBUTED TO EJIDOS, 1915-44, CLASSIFIED ACCORDING TO TYPE OF LAND	137
18. VARIATIONS IN THE AMOUNT OF EACH TYPE OF LAND DISTRIBUTED TO EJIDOS EACH YEAR FROM 1916 TO 1944	138
19. MAP SHOWING LOCATION, BY STATES, OF ALL THE LANDHOLDINGS IN MEXICO HAVING MORE THAN 10,000 HECTARES IN 1940	178
20. LANDS BELONGING TO FOURTEEN EJIDOS IN THE YAQUI VALLEY	183
21. PERCENTAGE OF MEXICO'S TOTAL POPULATION LIVING ON EJIDOS IN 1940, BY STATES	184
22. TREND IN NOMINAL WAGES, COST OF LIVING, AND REAL WAGES OF AGRICULTURAL LABORERS IN MEXICO, 1891-1944	260
23. MAP SHOWING THE AVERAGE ANNUAL WAGES RECEIVED BY FARM LABORERS IN MEXICO IN 1944, BY MUNICIPALITIES	

PART I

*The People of Mexico and Their
Geographical Environment*



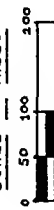
LEGEND

ALTITUDE ABOVE SEA LEVEL	
METERS	FEET
UNDER 200	UNDER 656
200 TO 1000	656 TO 3281
1000 TO 2000	3281 TO 6562
2000 AND OVER	6562 AND OVER
	⊙ VOLCANOES OVER 11,500 FEET

SOURCE

ADAPTED WITH MODIFICATIONS FROM
 CARTA ALTIMETRICA; DIRECCION DE GEOGRAFIA
 METEOROLOGICA E HIDROLOGIA

SCALE OF MILES



ALTITUDE MAP OF MEXICO

there are relatively few spots in the entire country, exclusive of the peninsula of Yucatán, where one can stand without being able to see mountains in the distance. The eastern and western ranges meet just south of Mexico City to merge into one chain, which ends abruptly at the Isthmus of Tehuantepec. South and east of this isthmus, mountain ranges rise again in the state of Chiapas and continue southward into the neighboring republic of Guatemala.

The mountain ranges are dissected generally by deep barrancas, giving much of the land the appearance of standing on end. In some of these areas, farming is practiced on hillsides so steep that it would be possible for a farmer to fall out of his field.² Of the one-third of the land area which can be classified as fairly level, much is situated either on the Yucatán Peninsula, which, for the most part, contains a very shallow soil not well adapted for general agriculture, or in the north-central region, where a semiarid climate prevails.

The mountain barriers tend to separate the population into numerous small isolated and distinct communities, each living according to its own peculiar customs and traditions that for ages have been transmitted from one generation to another. Modern systems of transportation and communication are now being developed, but as yet these reach only a small segment of the total population.

MUCH OF MEXICO IS SITUATED AT COMPARATIVELY HIGH ALTITUDES

As may be seen from Figure 2, more than half the total area of the country is situated at an altitude of more than 3,200 feet above sea level (the black and striped areas of the map combined); a considerable proportion is located at more than 6,500 feet above sea level. The lowlands, having an altitude of less than 650 feet above sea level, are confined to comparatively narrow bands along either coast and to the peninsula of Yucatán. The strip of low areas along the entire western coast is narrow, and in some instances the mountains extend almost to the seacoast. In many places the descent from an altitude in excess of 6,000 feet to one of less than 650 feet above sea level is very abrupt, leaving little land at the intervening levels.

Within the borders of Mexico, almost every type of climate in the world is to be found in greater or less degree. Striking differences in temperature take place within a short geographical distance. These differences result from the variations in altitude and from the position of the hills and mountains. Within the short distance of only a few

2. James, *op. cit.*, p. 645.

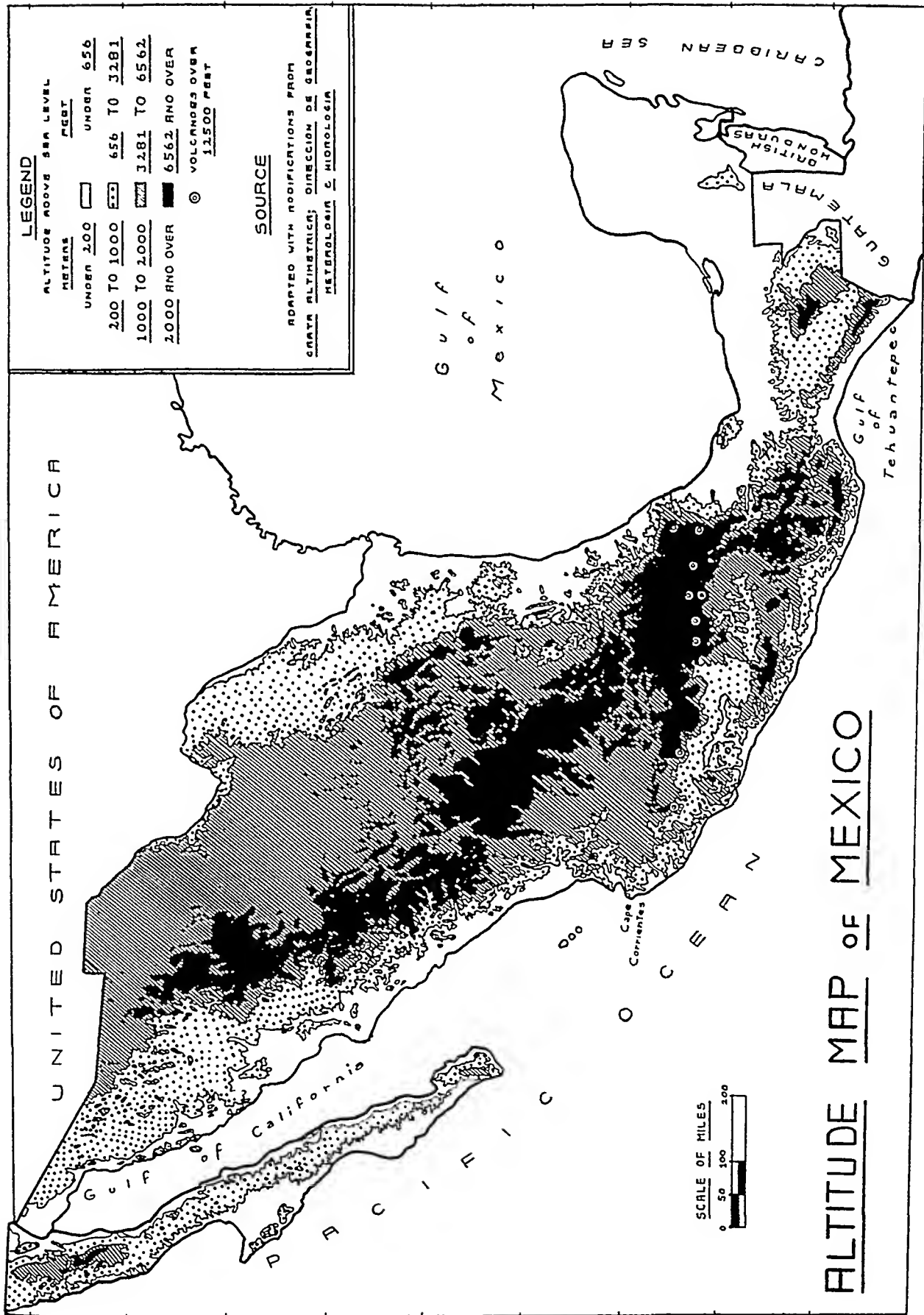


Fig. 2.—Altitude map of Mexico

to dry gullies in the wintertime. On the extensive plateaus there are few streams of any great length; for this reason, possibilities for extensive irrigation projects in some of these areas appear to be limited.

Geographical variations in the average annual rainfall in Mexico from 1921 to 1930 are shown in Figure 3. It is apparent that the rainfall is very unevenly distributed. The north is generally dry, but there are areas on the southern Gulf Coast, in the states of Veraeruz, Tabasco, and Campeche, where the rainfall averages from 50 to 118 inches per year. Certain spots south of the Gulf in the states of Tabasco and Veraeruz are deluged with over 118 inches of rainfall a year. In striking contrast to this area are the white areas shown on the map, in the north and northeast, which approximate desert conditions, with less than 7.5 inches of rainfall a year. It is almost impossible to raise crops successfully without irrigation on the land indicated by either the white or the dotted areas of the map. Even in the areas designated by horizontal bars, the production of corn and wheat is greatly limited without irrigation, except for restricted spots in isolated valleys. From the map it may be seen that these three areas in which rainfall is inadequate (the white, dotted, and horizontal bars) represent the greater part of the total area of the Republic. According to Thornthwaite's classification, Mexico's land area may be classified as follows: adequate moisture in all seasons, only 12.8 per cent; deficient moisture in all seasons, 49.9 per cent; deficient moisture in winter, 35.9 per cent; deficient moisture in summer, 1.4 per cent.⁴

RURAL MEXICO IS ISOLATED

Rural Mexico is geographically and culturally isolated from the general life of the nation. This is due partly to the mountainous nature of the country and partly to the lack of development of transportation and communication facilities for connecting the rural areas with the large centers of population. Mexico has made considerable progress in recent years in extending her system of trunkline highways, which link some of her principal urban centers. In a mountainous country, road building is expensive, and, although the federal government is spending about fifty million pesos a year (about \$10,309,279, or 5 per cent of the total federal budget)⁵ on her highways, there is still almost complete absence of village-to-market roads connecting

4. James, *op. cit.*, p. 614.

5. The allotment for highways in the official budget for 1945 was 49,000,856.35 pesos. In addition to this, a large sum was raised through the sale of bonds. At this writing, one United States dollar is worth 4.85 pesos.

the farm population with the trunk highways, railway stations, or marketing centers. Rural people are still dependent on the burro, the mule, or the human beast of burden to transport their goods to and from the markets. In many areas markets of any appreciable size are so far away that perishable products cannot be marketed at all, and the marketing of staple products becomes an expensive and time-consuming process. This is one of the reasons—the other is lack of control of tropical diseases (see chap. xiv)—why vast areas of the potentially more productive coastal regions have remained practically undeveloped.

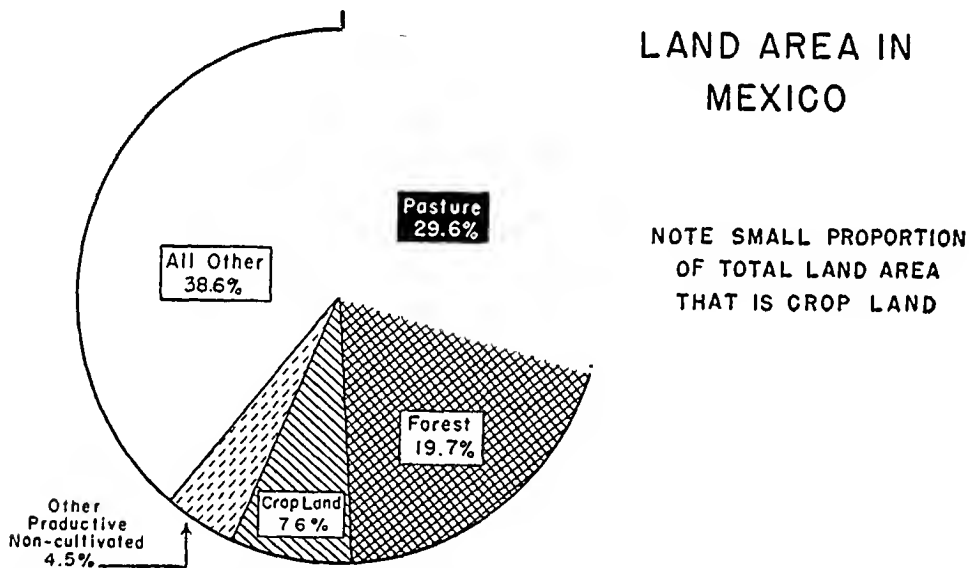


FIG. 4.—Land utilization in Mexico; showing proportion of land area used for indicated purposes. Data from Appendix A, Table 1, A.

Culturally, the rural people are so isolated that they have little opportunity to share in the advantages which modern science and education have brought to the homes and lives of many urban dwellers and to less isolated rural people. Having little contact with newer ideas and ways of doing things, they continue to live according to the customs and traditions of their forefathers, without any realization that more efficient ways and techniques may have been discovered.

As a result of the foregoing characteristics, a relatively large proportion of Mexico's total land area is at present unsuitable for agriculture. The amount of crop land is definitely limited by the mountainous nature of much of the area, by the lack of adequate rainfall,

by geographical isolation, and by lack of malaria control in some of the coastal areas which do have adequate rainfall. According to the agricultural census of 1940, only 7.6 per cent of the land area of the Republic was under cultivation at that time (Fig. 4 and Appen. A, Tables 1 and 1A).⁶

Four-fifths of the crop land is what is known in Mexico as "seasonal" land (*temporal*), in that it will produce crops only during the rainy season, which, in most parts of the country, is from May or June to September. Only one hectare out of eight is irrigated, and only 6.5 per cent is classified as being sufficiently humid not to need irrigation (Appen. A, Table 2).

NATURAL GEOGRAPHICAL DIVISIONS

The principal surface configurations of Mexico fall logically into a number of natural divisions, which are indicated roughly in Figure 5.⁷

THE CENTRAL PLATEAU

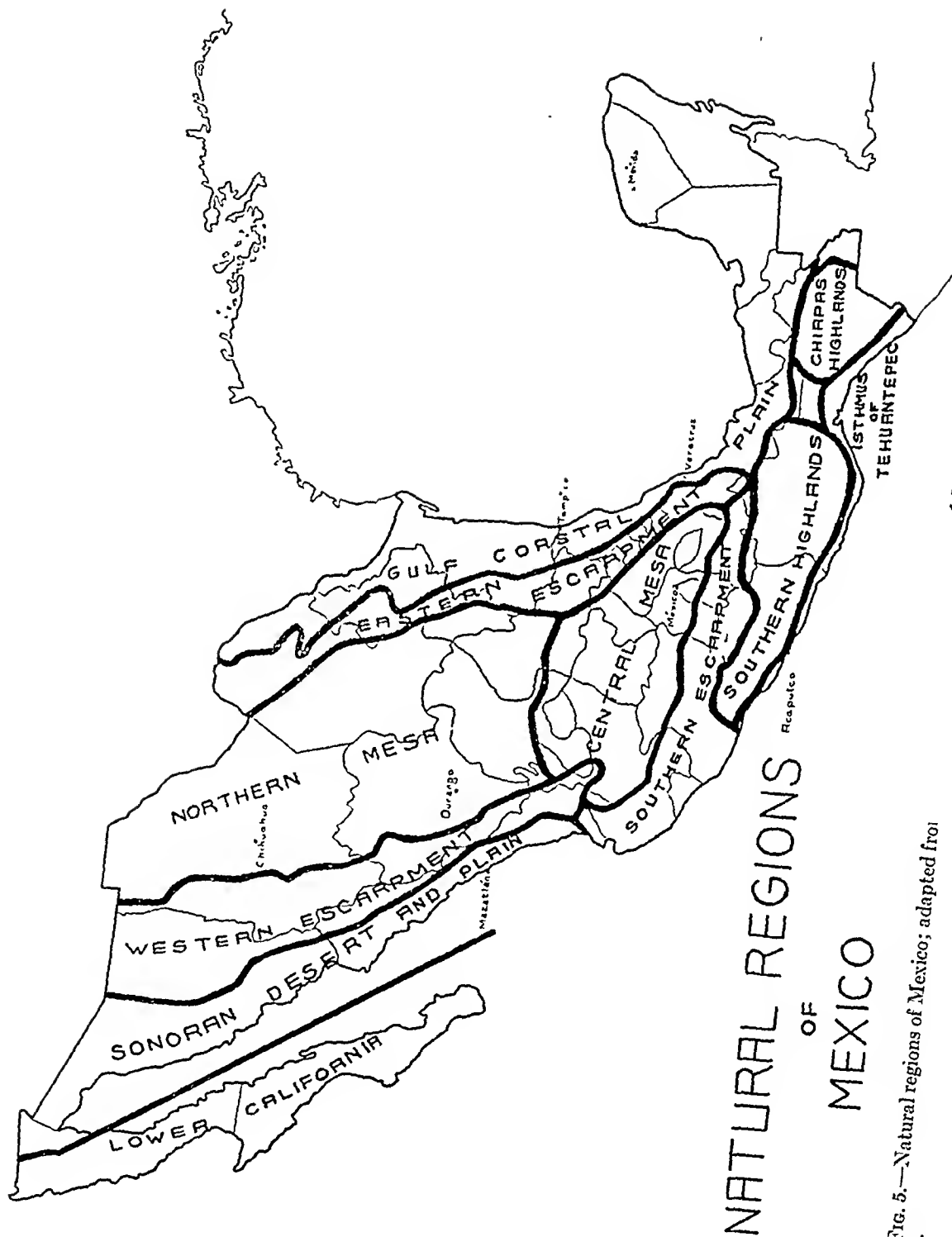
A high central plateau extends from the United States border southward to Mexico City, a total distance of about 1,225 miles. Starting at a height of 3,600 feet at Ciudad Juárez, across the border from El Paso, Texas, it gradually and steadily increases in altitude until it reaches an average of between 7,000 and 8,000 feet in the vicinity of Mexico City. The northern part not only is lower but also is much drier than the southern part and usually is referred to as the "Northern Mesa" (Mesa del Norte) (Figs. 1 and 5). A great deal of this area receives considerably less than 10 inches of rainfall annually and most of it less than 20 inches (Fig. 3); irrigation is therefore practically indispensable to the growing of crops. Since water for irrigation is scarce except in small restricted valleys, the principal use of the land is for grazing.

The southern part of the plateau is commonly known as the "Central Mesa" (Mesa Central) and is said to be the third highest plateau of its size in the world, exceeded in altitude only by the plateaus of Tibet and Bolivia.⁸ Across the southern part of the Central Mesa ex-

6. In 1930 the crop land amounted to 7.4 per cent of the land area, and it was estimated that the actual and potential crop land together might constitute 11.9 per cent of the total land area (Simpson, *op. cit.*, p. 157).

7. This description of natural divisions follows that of McBride, *op. cit.*, chap. i.

8. Herbert I. Priestley, *The Mexican Nation: A History* (New York, 1938), p. 5.



NATURAL REGIONS OF MEXICO

Fig. 5.—Natural regions of Mexico; adapted from
p. 8.

tends what is known as the "volcanic axis," consisting of one of the greatest chains of volcanic cones found anywhere on earth.⁹ This axis extends from Veracruz on the Gulf of Mexico across the country to Cape Corrientes on the Pacific Coast and includes hundreds of extinct volcanoes, including nine peaks which have an altitude in excess of 12,500 feet. These peaks are indicated by the small circles in Figure 2. They include such spectacular cones as Orizaba (18,548 ft.) Popocatepetl (17,845 ft.), and Ixtaccíhuatl (17,343 ft.). All three are crowned with perpetual snow, even though they are located at about the nineteenth parallel. The newest volcano erupted in the middle of a cornfield, in the state of Michoacán on February 20, 1943. By 1946 it had grown into a mountain towering several thousand feet above the countryside (see Frontispiece).

The temperature throughout the central region is far different from what the average reader might expect from Mexico's position with regard to latitude. Mexico City is much cooler in the summer and warmer in the winter than is New York, Chicago, or Boston. As one goes southward into Mexico from El Paso, Texas, the increasing altitude tends to counteract latitude so completely that the average annual temperature in Mexico City is lower than that of El Paso and much more uniform. The average temperature during the year in Mexico City is about 60° F., as compared with 63° in El Paso. The temperature during the warmest month (May) is only about 65° in Mexico City, as compared with 81° in the month of July in El Paso. During the coldest month of the year (January) the temperature averages 54.3° in Mexico City and 44.4° in El Paso.¹⁰

In order to get a true understanding of the climatic conditions of Mexico, one must become accustomed to thinking in vertical, as well as in horizontal, terms. Because of the high elevation and the mountainous topography, a large part of the country is in the peculiar situation of being *in* the tropics but not *of* them.¹¹

The Central Mesa, for the most part, consists of seven intermont basins¹² with their surrounding highlands and mountains. These basins, together with the states included in them, are:

1. Basin of Mexico (Anáhuac)—includes the Distrito Federal and parts of the states of México and Hidalgo
2. Basin of Puebla—includes parts of the states of Puebla and Tlaxcala

9. James, *op. cit.*, p. 608.

11. Simpson, *op. cit.*, p. 133.

10. *Ibid.*, p. 613.

12. James, *op. cit.*, p. 652.

3. Basin of Toluca—includes part of the state of México
4. Basin of Guanajuato—includes the southern part of the state of Guanajuato and the bordering parts of the highlands of Guanajuato, Querétaro, and Michoacán
5. Basin of Jalisco—includes part of the state of Jalisco
6. Valley of Aguascalientes—includes the state of Aguascalientes and extends into the near-by parts of Jalisco and Zacatecas
7. Valley of Morelos—includes the state of Morelos and the bordering edge of the state of Guerrero¹³

These basins are all situated at an altitude in excess of 5,000 feet, with the exception of Morelos, part of which is somewhat lower than this. Toluca Valley has an elevation in excess of 8,000 feet, and the valleys of Puebla and México exceed 7,000 feet.

Rainfall is more abundant in this region than farther north (Fig. 3), but it is still far from being adequate for the most efficient crop production. In the greater part of the region, crops can be grown only during the rainy season. The rains usually begin in May, although sometimes they are delayed until the first of June. When planting is late because of the delayed rainy season or when insufficient rain falls at critical growing seasons, the maturing process is delayed, and crops are often damaged greatly by fall frosts.

Corn is the principal crop in the central region, although many other products are grown as well. The basins of Guanajuato and Jalisco are commonly referred to as the *Bajío* and have often been spoken of as the "granary of Mexico" because traditionally a fair share of the nation's corn, wheat, and barley has been produced here.

THE ESCARPMENTS

The large central plateau is rimmed on three sides (east, west, and south) by steep escarpments which are dissected by deep barrancas or gorges. These escarpments are so steep and high that they tend to form mountain barriers, which make access to the central plateau difficult except from a northwesterly direction. This is probably one reason why most of Mexico's transportation routes run northward and southward. There are none which cross the country from east to west, except by circuitous routes.¹⁴

13. These are described in James (*ibid.*, pp. 652, 653).

14. The railway extends from Veracruz to Guadalajara. From Guadalajara one may take the train southward to the Pacific port of Manzanillo or northward to that of

The western escarpment is a high mountain range known as the "Sierra Madre Occidental." It extends from the United States border of Arizona southward as far as southern Nayarit and almost parallels the Pacific Coast. These mountains have an average height of 10,000-12,000 feet and are crisscrossed by deep canyons (Fig. 1). There are no railways or highways crossing them, and much of their area is practically unexplored. Transportation from one state to another, or even from one community to another, in some of these areas is possible only by means of long, circuitous routes. To get from Sinaloa, on the Pacific Coast, to the capital of the adjoining state of Chihuahua to the northeast, one would have to go northward through the state of Sonora to Nogales or Douglas, Arizona, then across New Mexico to El Paso, Texas, and back to Chihuahua; or one could go southward through the states of Nayarit and Jalisco, then turn northward through the states of Aguascalientes, Zacatecas, and parts of the states of Coahuila and Durango to reach Chihuahua City. The alternative would be to cross the Sierra Madre by muleback over treacherous mountain trails.

The eastern escarpment is known in Mexico as the "Sierra Madre Oriental" and extends along the Gulf Coast from the United States border to the vicinity of Córdoba, Veracruz. In contrast to the Sierra Madre Occidental, there are only a few places where the mountains tower much above the plateau. For the most part, there is merely an abrupt drop from the high plateau to the low coastal plain, but the suddenness and rapidity of the descent gives the escarpment the resemblance of a high wall separating the coastal areas from the Central Mesa. This wall is cut at irregular intervals by deep barrancas. While the eastern escarpment presents serious barriers to the construction of transportation systems leading onto the plateau, these are much less formidable than those of the western sierra. There are several mountain passes which have been utilized for highways and railways. The more important of these are located in the vicinity of the cities of Monterrey, Tampico, Jalapa, and Orizaba.

The southern escarpment is located just south of the volcanic axis and tends to form a sort of semicircle connecting the eastern and

Mazatlán. There is a railway running northward and southward across the Isthmus of Tehuantepec. There is a highway extending southward to the Pacific port of Acapulco from Mexico City. There is a highway projected across the mountains from the city of Durango to Mazatlán on the Pacific Coast, but this is far from finished.

western escarpments. The high volcanoes form huge mountain peaks at the southern end of the Central Mesa and extend entirely across the continent (Fig. 2). The southern escarpment is composed of the steep slopes descending from this volcanic chain to the valley of the river Balsas on the south and west and to the valley of the river Papaloapan on the southeast. These two river systems—the Balsas flowing into the Pacific Ocean just south of the eighteenth parallel and the Papaloapan flowing into the Gulf just south of the nineteenth parallel—have eaten their way back through the mountains until they have almost met in southern Puebla and northern Oaxaca.¹⁵ The descent from the Central Mesa into these river valleys is generally steep and abrupt.

THE SOUTHERN HIGHLANDS

South of the river Balsas the land surface rises again into what the Mexicans usually refer to as the “Sierra Madre del Sur” (southern Sierra Madre) in the states of Guerrero and Oaxaca. This is what geographers refer to as a region of mature topography. As McBride says:

Progressive elevation of the region has but served to intensify erosive activity in the many streams that descend from the interior, until at present there remain only steep-sloped valleys and narrow ridges, with little level ground either in valley floors or in interfluvial spaces. It is all what the Mexicans call *pura sierra*, a region of mature topography.¹⁶

Outside the Oaxaca Valley there is little land in this area that is level enough to offer very great opportunities for agriculture. Most of the farming must be carried on in the narrow valleys and on the hillsides. In addition to being mountainous, much of this area is also dry. This is especially true of the western slopes. Until a few years ago there were no highways or railways that traversed these highlands in any direction. Even at the present time a large area in the southwestern part of the state of Guerrero is marked on official maps of Mexico as unexplored. Railways now extend in Guerrero southward only to the Balsas River and in Oaxaca only slightly beyond Oaxaca City. In 1940 the highway was completed from Mexico City to Acapulco on the Pacific coast of Guerrero. The Pan-American Highway has now been extended from Puebla as far south as Oaxaca City.

15. McBride, *op. cit.*, p. 18.

16. *Ibid.*, p. 15. Reprinted by permission of the American Geographical Society.

Aside from these few transportation lines, the area is entirely isolated from communication with the outside world.¹⁷

The southern highlands are separated from the highlands of Chiapas by a low divide at the Isthmus of Tehuantepec. The Chiapas highlands form the beginning of a mountainous region which extends through the Central American countries of Guatemala, Honduras, and Nicaragua. Only the northern end projects into the state of Chiapas, Mexico, and here the highlands have been divided into two sections by the eroding activity of the Grijalva River.

The states of Chiapas, Oaxaca, and Guerrero combine to make one of the most isolated and mountainous regions in all Mexico. Communication facilities with the outside world are almost nonexistent. Less than 20 per cent of the total land area is classified as level. The rest is mountainous, and the local population lives in small, isolated villages clinging to steep hillsides, perched upon narrow ridges, or cramped into narrow river valleys. Although the Pan-American Highway is being extended through this area and will connect some of the larger towns with the outside world, the physical barriers to road construction are so great that branch roads connecting the thousands of isolated villages with the main highway probably will not be constructed for many generations. It seems likely, therefore, that the vast majority of the population in this area will continue to live in isolated communities just as they have for generations past.

THE COASTAL LOWLANDS

The lowlands are confined to relatively narrow areas along both coasts between the escarpments and the sea. On the western side this band is fairly wide in the north but becomes so narrow toward the south that, in some instances, the mountains extend nearly to the water's edge. Furthermore, much of this narrow strip on the western coast is so dry that it is useless for farming without the benefit of irrigation. The coast line from Nayarit northward to the United States border could be classed as semidesert. Agriculture is, therefore, confined largely to the river valleys. The coastal fringe extending from Cape Corrientes southward to the Isthmus of Tehuantepec is more moist but so narrow as to offer little opportunity for agriculture. The plain broadens considerably at the isthmus but narrows again along the southern coast of Chiapas. This latter coastal strip is much more

17. Air lines have recently established routes which connect most of the larger cities of Mexico.

moist than that farther north and offers more opportunities for farming, provided that tropical diseases can be controlled.

The eastern coastal plain is wider in some parts than the western plain and offers some of the greatest opportunities for future agricultural development. In contrast to the western coast, much of the Gulf Coast has more moisture than any other region of Mexico. The Gulf Coast is, nevertheless, generally considered an unhealthful place in which to live, first, because of the enervating effect of extreme heat and high humidity and, second, because of the presence of malaria and various kinds of tropical fevers. For this reason the area is not so heavily populated as its agricultural potentialities seem to warrant.

In spite of these difficulties, the state of Veracruz, much of which is found in the eastern coastal plain, is now considered by Mexicans to be the most important agricultural state in the nation from the standpoint of the value of crops raised. It produces a wide variety of products, including bananas, coffee, citrus fruits, pineapple, tobacco, vanilla beans, mangoes, papayas, and a large number of other tropical fruits in addition to the staples of corn and beans.

The eastern plain tends to flatten out at the Isthmus of Tehuantepec with the result that practically all Tabasco and the Yucatán Peninsula is flat country. Tabasco is known especially for its banana production and to a less extent for its cattle and its hardwood forests. This state has very important agricultural potentialities, but it has a most serious problem of drainage because the surface is flat and the amount of yearly rainfall is greater than for any other area in Mexico (Fig. 3). The annual rainfall at Coatzacoalcos, Veracruz, near the border of Tabasco, reached an average of 122.7 inches a year for the three-year period 1937-39.¹⁸ The several rivers which flow northward through the state of Tabasco overflow their banks during rainy seasons, creating stagnant pools, which serve as breeding grounds for mosquitoes, thus resulting in widespread malaria among the inhabitants.

The Yucatán Peninsula is virtually an island as far as communication with the mainland is concerned. There are no highways or railways connecting it with the rest of Mexico. All transportation between the peninsula and the mainland must be carried on by water routes or by recently developed air service. This isolation tends to give the peninsular residents a feeling of scarcely belonging to Mexico. Resi-

18. Dirección General de Estadística, *Anuario estadístico de los estados unidos mexicanos* (Mexico City, 1941), p. 11. The heaviest mean annual precipitation for any state in the United States during 1945 was 60.7 inches in the state of Alabama.

dents of Yucatán are much more likely to refer to themselves as "Yucateccans" than as "Mexicans." The Mexican government is extending a railway from Tabasco to Campeche, and when it is completed it will connect the peninsula with the mainland.

The northern edge of the peninsula is dry, and the soil is shallow. It is devoted chiefly to the growing of henequen and sisal fibers, which are used for making binding twine in such countries as the United States, Canada, and Russia, where the production of wheat has become mechanized. Moisture increases in Yucatán as one goes inland. At Progreso, on the north coast, the rainfall averages only about 18 inches a year, but at Mérida, about 20 miles inland, it is 35 inches, and at Valladolid, 103 miles inland from Progreso, it is 48 inches.¹⁹ The peninsula is flat and there are practically no rivers.

Toward the interior of Yucatán, corn is the chief crop, and a semi-nomadic type of agriculture tends to prevail. This is because of the shallowness of the soil and the rapidity with which its fertility is exhausted. In order to plant corn a plot of land is cleared of bush by cutting it down and burning it. The land is then planted for two or, at the most, three years consecutively. It is then abandoned for six or seven years and allowed to grow up to bush again so that it may accumulate humus and again become fertile. In the meantime the farmer moves on successively to the clearing and planting of other plots.

Eastern Campeche and Quintana Roo contain large chicle forests, from which are exported each year to the United States about eleven million pounds of chicle, representing a value of nearly five million dollars. The chicle is made into chewing gum by the large concerns in the United States. Quintana Roo, Campeche, and Tabasco also have extensive forests of mahogany and other hardwoods.

STATISTICAL REGIONS

Mexican official statistics are not compiled exactly according to the natural divisions. They are compiled by states and then are grouped into regions which take into account some of the major natural divisions, except that they do not cut across state boundaries. These groupings will be used in presenting statistical data in this work because all official statistics are tabulated according to these regions, and the additional refinement that could be achieved from regrouping the

19. Robert Redfield, *The Folk Culture of Yucatan* (Chicago, 1941), p. 5.

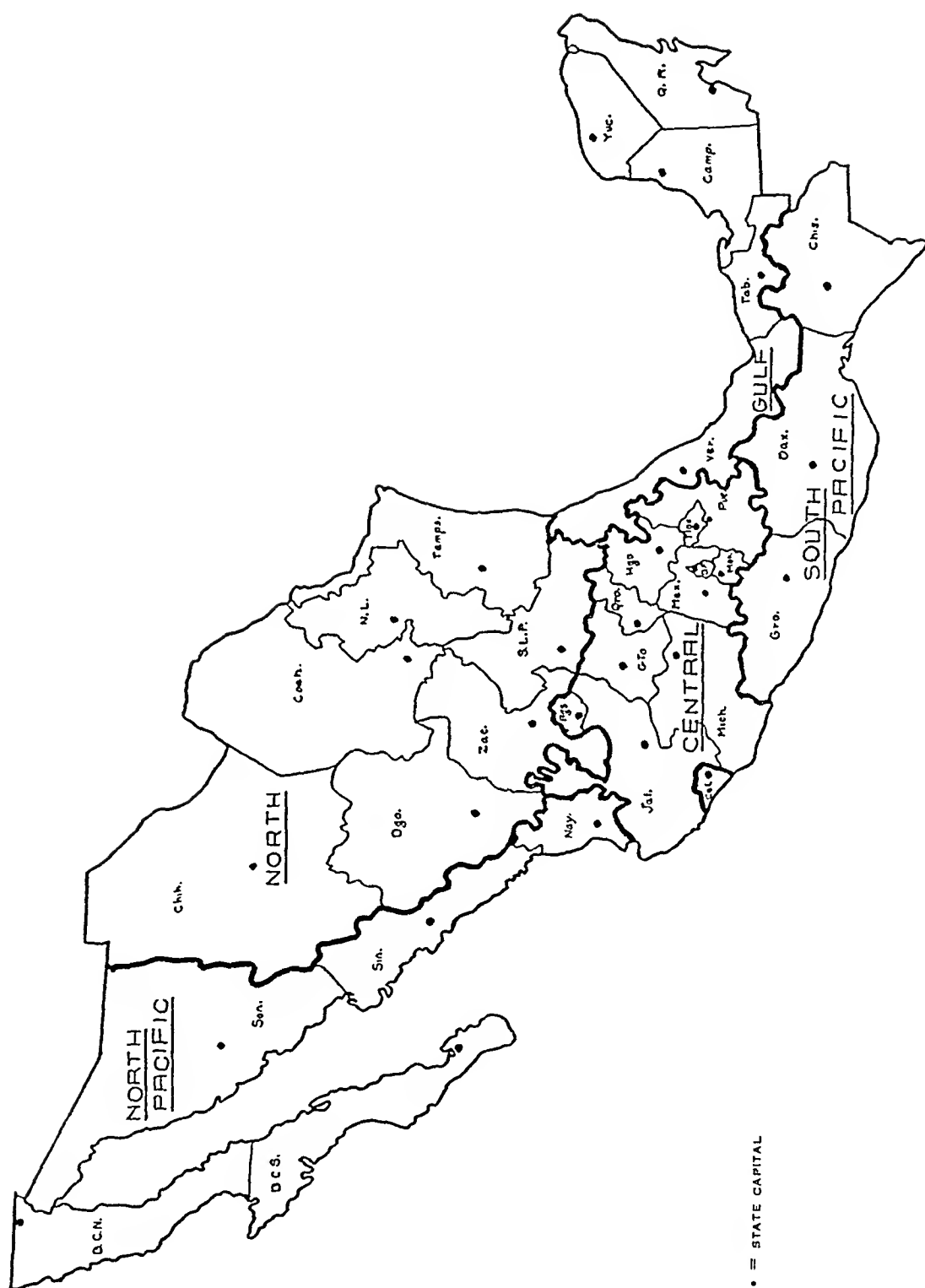


Fig. 6.—Statistical regions of Mexico; showing the states which constitute each region

data according to natural divisions would not warrant the effort involved. The five regions used are shown on the map in Figure 6. By comparing this with Figures 1 and 5, one may visualize approximately the physical features of each region. The regions, together with the names of the states and territories included in each region are as follows:

NORTH PACIFIC

Baja California Norte
Baja California Sur
Nayarit
Sinaloa
Sonora

Jalisco
México
Michoacán
Morelos
Puebla
Querétaro
Tlaxcala

NORTH

Coahuila
Chihuahua
Durango
Nuevo León
San Luis Potosí
Tamaulipas
Zacatecas

GULF

Campeche
Quintana Roo
Tabasco
Veracruz
Yucatán

CENTRAL

Aguascalientes
Distrito Federal
Guanajuato
Hidalgo

SOUTH PACIFIC

Colima
Chiapas
Guerrero
Oaxaca

The regions include all of Mexico's twenty-eight states, three territories, and federal district. The three territories are Baja California Norte, Baja California Sur, and Quintana Roo. The federal district includes Mexico City and vicinity and is called Distrito Federal. For convenience, the states and territories will be referred to hereafter merely as "states."

Growth and Distribution of the Population

GROWTH OF POPULATION

MUCH of what is now central Mexico was rather densely settled when the Spaniards arrived in 1516. Just how many Indians there were at that time is not known. Some scholars believe that the number was greater than the total number of inhabitants of Mexico at the present time. Estimates range all the way from about 7,000,000 to 30,000,000. Andrés Molina Enríquez, after examining the various available estimates, reaches the conclusion that there were not less than 25,000,000 inhabitants.¹ Even if we accept the much more conservative estimate of only 7,000,000, it would mean that there were about one-third as many inhabitants as there are today. Since Cortés had with him only 633 men,² it seems utterly fantastic that so few Spaniards were able to overpower and conquer so many Indians.³

The Spaniards came as conquerors, succeeded in subjugating the Indians, established themselves as a ruling class, and superimposed their own institutions and culture on the previously existing native cultures. This fact is fundamental to an understanding of the problems which have confronted Mexico throughout her history. Quite different was the process of settlement which took place in the United States. The Pilgrim Fathers came as colonists to settle a wilderness, inhabited only by scattered Indian tribes so few in number that they

1. Andrés Molina Enríquez, *La Revolución agraria de México* (5 vols.; Mexico City, 1933-37), I, 70.

2. Ernest Gruening, *Mexico and Its Heritage* (New York, 1928), p. 15. According to Gruening, these are Cortés' figures.

3. For a fascinating account of the techniques used by these few conquistadors in subjugating the Indians, as related by an eyewitness, see Bernal Díaz del Castillo, *The Discovery and Conquest of Mexico, 1517-1521*, ed. Genaro García, trans. A. P. Maudslay (London, 1939).

were either exterminated or driven farther westward into restricted areas to make room for the new settlers. In the United States, European peoples as well as European institutions and culture were transplanted to a virgin soil that was easily cleared of previous encumbrances; the population and its institutions therefore grew from the beginning as a more or less homogeneous civilization.⁴ In Mexico, on the other hand, both the Indian and his culture survived, and throughout the years they have constituted the fundamental and basic elements of Mexican civilization. The superimposing of a Spanish civilization on the previously existing Indian base has resulted in a much more complex and heterogeneous rural society than that found in the United States. This will become apparent as this study progresses.

It should be pointed out that, while the conquerors did not completely exterminate the Indians, they must have committed terrific slaughter among them, since, in the process of bringing them under subjection, the native population was reduced to less than two-thirds of its former size. Thus, while 7,000,000 appears to be a conservative estimate of the number of inhabitants in pre-Conquest Mexico,⁵ estimates of the population after the Conquest placed the total number of inhabitants at about 5,000,000. What proportion of this reduction in population was due to factors other than wars and massacres is not known. It is generally believed that many deaths were attributable to diseases introduced by the Spaniards to which the Indians had developed no immunity, such as smallpox and syphilis.

After the Conquest the population grew slowly, and it has continued to do so during most of Mexico's history, until recent years, when it is increasing rapidly (Table 1). Mexico contained about 5,000,000 inhabitants in 1795⁶ and by 1940 reported a total population of 19,653,552, or an increase of about 293 per cent in 145 years. The United States, in contrast, had a population of only 3,929,214 in 1790 but by 1940 reported a total population of 131,669,275, an increase of 3,251 per cent in 150 years. Much of the increase in population in the United States has been due to large successive waves of immigration; Mexico has experienced no such waves. Her increase has been due almost entirely to the surplus of births over deaths. Furthermore, she has actually lost population at times through emigration, through revolutions, and through loss of about half her

4. Eyler N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, 1937), p. 233.

5. *Ibid.*, p. 234.

6. These early population figures are all estimates and may contain a large degree of error.

TABLE 1
GROWTH OF POPULATION IN MEXICO, 1521 TO 1940*

Year	No. of Inhabitants	Source of Data	Year	No. of Inhabitants	Source of Data
1521..	9,120,000	C. A. Nieve	1857	8,247,660	Hermosa
1521...	7,264,059	J. M. Pérez Hernández	1857	8, 87,413	Orozco y Berra
1793...	4,483,499	Revillagigedo	1861	8,212,579	García Cubas
1795.	5,200,000	Revillagigedo	1862	8,396,524	J. M. Pérez Hernández
1799 ...	4,500,000	M. Abad y Queipo	1862 .	8,816,174	Sociedad de Geografía y Estadística
1803..	5,773,005	Humboldt	1863 .	8,232,035	Orozco y Berra
1803. .	5,837,100	Humboldt	1864.	8,629,982	F. Pimentel
1805	5,764,731	Tribunal del Consulado	1865	8,259,080	Orozco y Berra
1808	6,000,000	Lucas Alamán	1868 ...	8,396,845	E. Lefevre
1808 .	6,500,000	Humboldt	1869	8,743,614	García Cubas
1810	5,810,005	Semanario Económico	1871 .	9,097,056	Secretaría de Gobernación
1810 .	6,122,354	Navarro y Noriega	1871	9,176,082	García Cubas
1811 .	6,000,000	Tribunal del Consulado	1872 .	8,655,553	Congreso de la Unión
1817	5,000,000	M. Abad y Queipo	1872	8,836,411	M. Payno
1820	6,204,000	Cálculo del Primer Congreso Mexicano	1872	9,141,661	García Cubas
1823 .	6,800,000	Humboldt	1873	8,994,724	Balcárcel
1824 .	6,500,000	Poinsett	1873	9,209,765	Censo
1830	7,996,000	Burkardt	1874.	8,743,614	Rivera Cambas
1831	6,382,264	Censo publicado por Valdés	1874	9,343,470	García Cubas
1834 ..	7,734,292	Calendario de Galván	1875	9,495,157	García Cubas
1836 .	7,843,132	Noticias de los Estados y Territorios de la República Mexicana	1877	9,384,193	Secretaría de Gobernación
1838 .	7,009,120	Dictamen de la Comisión de la C. de Diputados	1878	9,686,777	C. Pacheco
1838.	7,044,140	Cálculo del Instituto de Geografía y Estadística	1879	9,908,011	Matías Romero
1842 ...	7,016,300	Estimación para las elecciones del Congreso	1880 .	9,577,279	E. Bustos
1846....	7,500,000	Almonte	1880	9,908,011	Anales del Ministerio de Fomento
1852...	7,661,919	Almonte	1881 . .	10,025,649	L. Castro
1854 ...	7,853,395	Anales del Ministerio de Fomento	1882 .	10,001,884	Bodo von Flümer
1856 .	7,661,520	Lerdo de Tejada	1885	10,447,984	García Cubas
1856	8,283,088	García Cubas	1886 .	10,791,685	García Cubas
			1888 .	11,490,830	Dirección de Estadística
			1889. ..	11,395,712	García Cubas
			1892	11,502,583	R. de Zayas Enríquez
			1892	11,872,137	A. M. Domínguez
			1895 .	12,632,427	Censo General
			1900 .	13,607,272	Censo General
			1910	15,160,369	Censo General
			1921. . .	14,334,780	Censo General
			1930. . .	16,552,722	Censo General
			1940 .	19,653,552	Censo General

* Data from *Anuario estadístico de los estados unidos mexicanos* (1940) (Dirección General de Estadística).

former territory to the United States, including what are now the states of Texas, New Mexico, Arizona, California, Nevada, Utah, and parts of Colorado and Wyoming. From 1910 to 1921 there was a decrease of 825,589 inhabitants, or 5.5 per cent.

The slow growth in Mexico has taken place in spite of the fact that she has always had a high birth rate. In 1941, for instance, the birth rate was 43.5 per thousand inhabitants, as compared with a rate of 18.9 per thousand for the same year in the United States. The high fertility of Mexican women in comparison with women of the United States is indicated by relating the number of young children to the number of women of childbearing age. In the United States, in 1940, there were 329 children under five years of age per thousand women fifteen to forty-four years of age. In Mexico during the same year the number was 630, or nearly twice as many. According to Manuel Gamio, the explanation for the slow growth of Mexico's population may be attributed largely to three factors: (1) a high mortality rate from diseases and privations, brought about by prolonged economic poverty and cultural backwardness, (2) a high mortality rate resulting from frequent wars and revolutions, (3) emigration to foreign countries.⁷ A fourth factor—loss of population through annexation of former Mexican territory by the United States—might also be added.

Perhaps it should be remarked that although until recently the population of Mexico has increased slowly throughout the years, Mexico has many more inhabitants than any other Latin-American country except Brazil. Official estimates of the total number of inhabitants in the larger countries of South America for 1940 or 1941 are as follows: Brazil, 41,565,083; Argentina, 13,517,135; Colombia, 9,387,930; Peru, 7,023,111; Chile, 5,023,539; and Venezuela, 3,951,371 (see Appen. A, Table 3).

There have been two periods of comparatively rapid growth in Mexico's population. The first of these was from 1885 to 1910, during the long dictatorship of Porfirio Díaz. This was a peaceful period in which all incipient rebellions were ruthlessly stamped out before they had an opportunity to spread. The second period of rapid growth began in 1921 and is still going on. This comprises the period following the official termination of the military aspects of the Revolution of 1910–20. We have noted previously that there was a decline in population during the period from 1910 to 1921. It is reasonable to suppose that cessation of hostilities on a large scale would result

7. Manuel Gamio, *Hacia un México nuevo* (Mexico City, 1935), pp. 23, 24.

in a decrease in the death rate and that the returning of the men from army camps to their homes would result in an increase of the birth rate. These two factors might be of considerable importance in accounting for the increase in population experienced during the period 1921-30. Another factor which must be taken into consideration is the relatively greater completeness of enumeration in the census of 1930 over that of 1921. It is generally acknowledged that the 1930 census was more complete than were previous censuses, especially in the more isolated regions. The census of 1921 was taken at the end of a long civil war, and it is unlikely that trained personnel and facilities were available in sufficient numbers to insure complete coverage; therefore, some of the apparent increase in 1930 over 1921 may be fictitious, in that it represents merely greater accuracy of enumeration.⁸

The increase in population from 1930 to 1940 was the greatest ever recorded for a ten-year period in Mexican history (18.7 as compared with 7.2 per cent in the United States for the same period). Part of this, also, may have been due to more complete coverage in the census enumeration. There is some indication that greater efficiency was realized in securing data for some of the more isolated regions than was the case even in 1930. This is suggested by the fact that the 1940 census enumerated 51,858 more persons five years of age and over who speak Indian languages exclusively than were so recorded in 1930. These groups inhabit the more isolated areas. Since the educational program of Mexico has as one of its fundamental objectives the teaching of Spanish to the Indians and since the long-time trend has been toward the disappearance of Indian languages in some regions, it seems likely that the data from the census on this point merely reflect greater coverage in the more isolated areas which are occupied by indigenous groups. There is considerable evidence to the effect that the 1940 census was the most complete that Mexico has ever witnessed.

After making all due allowance for whatever unknown influence the factor of greater relative completeness of enumeration requires, however, it still seems probable that the net increase in Mexico's population during the decade 1930-40 was relatively great. This becomes apparent when one examines the natural increase of the population from 1930 to 1942 (Table 2). The Mexican birth rate exceeded the death rate by an amount sufficient to leave an excess of births over deaths in 1942 of 22.8 per thousand inhabitants. This is more

8. *Ibid.*, p. 24.

than twice as many excess births as were recorded in the United in the same year (10.6). Although the death rate in Mexico is than twice as high as that in the United States, nevertheless excess of births over deaths in Mexico exceeded even the total rate in the United States in ten of the thirteen years indicated in Table 2.

Mexico also appears to have a greater excess number of births over deaths than is found in most other countries of Latin America.

TABLE 2

EXCESS OF BIRTHS OVER DEATHS IN MEXICO IN COMPARISON WITH THE RATE FOUND IN THE UNITED STATES, BY YEARS, 1930-42*

YEAR	MEXICO			UNITED STATES		
	No. of Births per 1,000 Inhabitants	No. of Deaths per 1,000 Inhabitants	Excess of Births over Deaths	No. of Births per 1,000 Inhabitants	No. of Deaths per 1,000 Inhabitants	Excess of Births over Deaths
1930.	49.4	26.6	22.8	18.9	11.3	7.6
1931.	43.8	25.9	17.9	18.0	11.1	6.9
1932.	43.4	26.1	17.3	17.4	10.9	6.5
1933.	42.3	25.8	16.5	16.6	10.7	5.9
1934.	44.5	23.9	20.6	17.2	11.1	6.1
1935.	42.5	22.7	19.8	16.9	10.9	6.0
1936.	43.3	23.7	19.6	16.7	11.6	5.1
1937.	44.4	24.6	19.8	17.1	11.3	5.8
1938.	43.9	23.1	20.8	17.6	10.6	7.0
1939.	45.0	23.2	21.8	17.3	10.6	6.7
1940.	43.5	22.8	20.7	17.9	10.8	7.1
1941.	43.5	22.1	21.4	18.9	10.5	8.4
1942.	45.6	22.8	22.8	21.0	10.4	10.6

* Data for Mexico from Dirección General de Estadística; data for the United States from *Statistic of the United States* (1943).

In 1942, for example, the excess of births over deaths per thousand inhabitants was reported as 21.4 in Costa Rica, 19.4 in Venezuela, 18.0 in El Salvador, 17.4 in Colombia, 12.9 in Chile, and 10.6 in Argentina.

IMMIGRATION

Part of Mexico's increase in population during the 1930-40 decade undoubtedly was due to immigration. During this decade there were 449,287 immigrants and 113,504 emigrants, which leaves a net balance of 335,783 immigrants. The net immigrants amount to about one-tenth of the total population increase during the decade (calculated from Table 3). There was a tremendously large immigration in 1930, as compared to other years, but this was due almost entirely to

return of repatriated Mexicans from the United States. The repatriated Mexicans have predominated as immigrants over other nationality groups during the period. After 1934 both immigration and emigration were at a low ebb, except for the exodus of wage hands to the United States (1942-44) to help with the harvesting of crops and to work on the railroads because of the labor shortage brought about by World War II. Under the agreements of this short-term

TABLE 3
NUMBER OF IMMIGRANTS ENTERING MEXICO AND NUMBER OF
EMIGRANTS LEAVING MEXICO, BY YEARS, 1927-44*

Year	No. of Immigrants	No. of Emigrants	Excess of Immi- grants over Emigrants†
1927	84,419	88,330	- 3,911
1928	88,186	74,940	13,246
1929 .	85,152	43,337	41,815
1930	85,190	31,665	53,525
1931	134,619	21,781	112,838
1932	82,336	10,090	72,246
1933	37,232	7,622	29,610
1934	27,607	8,108	19,499
1935	19,005	9,159	9,846
1936	15,572	7,966	7,606
1937	11,972	6,501	5,471
1938	12,732	5,934	6,798
1939.	23,022	4,675	18,347
1940	15,129	5,418	9,711
1941	9,012	6,984	2,028
1942	9,825	6,109	3,716
1943	6,521	7,328	- 807
1944	9,714	6,936	2,778
Total‡ ..	757,245	352,883	404,362

* Data from Dirección General de Estadística.

† Excess of emigrants is indicated by a minus sign.

‡ This table does not include the temporary laborers going to and from the United States during World War II as a part of the Farm Labor program.

migration program, 198,744 workers left Mexico during 1942-44 for the purpose of working temporarily in the United States. It is assumed that most of these workers have now returned to Mexico.⁹

Thus, although immigration contributed to the increase in population during the decade 1930-40, most of the increase is probably due to the excess of births over deaths. An official estimate of the population of Mexico as of June 30, 1945, is 22,178,423 inhabitants. This would mean that, since 1930, the population has increased by 5,625,701 inhabitants, or 34 per cent. The implications of such a rapidly expanding population with reference to the necessity for

9. This program will be discussed in more detail in chap. xi.

adjusting and modifying social and economic institutions in order to meet the changing needs brought about as a result of this rapid increase are exceedingly important and far-reaching. Programs that were devised to meet the needs of 1930 are no longer adequate for a population that is one-third greater. Agricultural production practices and techniques that might have been more or less adequate to feed a nation of 16,500,000 inhabitants are experiencing severe stresses and strains in trying to provide food for 22,000,000. The educational system finds itself hard pressed to provide additional school facilities with which to meet the needs of the expanding school population, to say nothing of combating the high rate of illiteracy that has existed for generations. The incipient health programs, woefully inadequate to meet the needs of a few years ago, are almost overwhelmed by the increasing needs for their services. In short, Mexico's predicament is not only one of strengthening institutions and programs that were inadequate to satisfy even the needs of a stationary population but also one of providing institutional facilities for rapidly increasing numbers as well.

DISTRIBUTION OF THE POPULATION

DENSITY OF POPULATION

With a land area about one-fourth as great as continental United States, Mexico has only about 15 per cent of the population. The density of population in Mexico is 25.9 inhabitants per square mile as compared with 44.2 in the United States. Although Mexico's density of population is much lower than that in the United States, it is greater than that found in the larger countries of Latin America. In 1940 Brazil had only about 12.6 inhabitants per square mile, Argentina 12.6, Colombia 21.3, Chile 17.5, and Venezuela 11.2. On the other hand, some of the smaller Latin-American countries are much more densely populated than Mexico. El Salvador has 138.9 persons per square mile, Cuba 95.7, Guatemala 77.5, and Uruguay 30.3 (Appen. A, Table 3).

GEOGRAPHICAL DISTRIBUTION

Mexico's population is very unevenly distributed geographically. Nearly half her inhabitants are crowded into the Central Mesa, which comprises less than one-seventh of the total land area. On the other hand, there are vast areas in other parts of the country which remain almost uninhabited (Fig. 7).

The heaviest concentration of population is found in the central

DISTRIBUTION OF POPULATION MEXICO - 1940

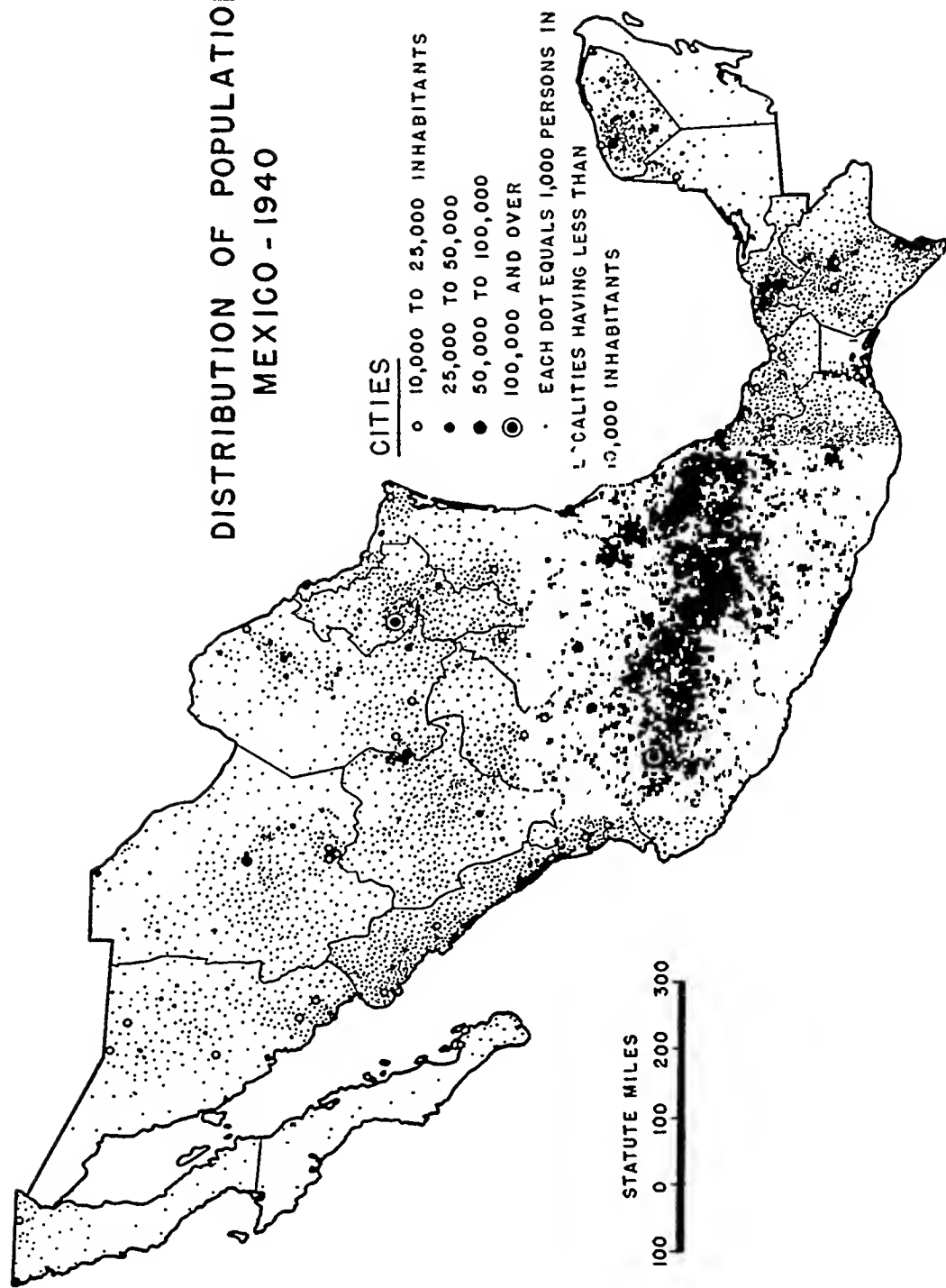


FIG. 7.—Geographical distribution of Mexico's population. Data from *Sexto censo de población* (1940) (Dirección General de Estadística). The dots are distributed within minor civil divisions. The smallest dots include the rural population.

highlands extending from east-central Veracruz, near the east coast, across the country to Cape Corrientes on the west coast. As shown in Figure 2, most of this area is over 6,500 feet in altitude and follows the volcanic axis. From a comparison of the population maps with the altitude map it would appear that the population tends to follow the higher altitudes, except for the mountainous area of the western

TABLE 4
STATES OF MEXICO CLASSIFIED ACCORDING TO DENSITY OF
POPULATION AND ALTITUDE OF THEIR STATE CAPITALS*

State	No. of Inhabitants per Square Mile in 1940	Altitude of State Capital above Sea Level (Feet)
Distrito Federal.....	3,089.5	7,849.4
Tlaxcala.....	144.1	7,388.8
México.....	138.6	8,661.8
Puebla.....	98.6	7,093.5
Hidalgo.....	95.8	8,025.3
Morelos.....	95.8	5,059.3
Guanajuato.....	88.7	6,837.6
Aguascalientes.....	64.7	6,260.1
Veracruz.....	58.3	4,682.0
Querétaro.....	55.2	6,119.1
Michoacán.....	50.9	6,188.0
Jalisco.....	45.5	5,092.1
Colima.....	39.2	1,658.6
Oaxaca.....	32.8	5,069.1
Guerrero.....	29.4	4,462.2
Tabasco.....	29.2	32.8
Yucatán.....	28.1	29.5
San Luis Potosí.....	27.8	6,158.4
Chiapas.....	23.7	1,738.9
Sinaloa.....	21.8	275.6
Nuevo León.....	21.5	1,765.2
Nayarit.....	20.5	3,002.1
Zacatecas.....	20.1	8,189.4
Tamaulipas.....	14.9	1,102.4
Durango.....	10.2	6,815.9
Coahuila.....	9.5	5,246.3
Chihuahua.....	6.6	4,632.8
Sonora.....	5.2	777.6
Campeche.....	4.6	16.4
Baja California N.....	2.8	3.3
Baja California S.....	1.8	42.7
Quintana Roo.....	1.0	9.8

* Data from Dirección General de Estadística. The number of inhabitants per square mile in Mexico in 1940 was 25.9.

Sierra Madre, which is almost uninhabited. Whenever the altitude drops below 3,200 feet, the population tends to become very sparse. There are certain important exceptions to this tendency. The Isthmus of Tehuantepec has clusters of population in low altitudes, as have parts of the states of Veracruz, Yucatán, and Sinaloa. In general, however, the relationship seems to hold. This may be illustrated

by a comparison of the altitudes of the various state capitals with the density of population in the states which they represent (Table 4). The state capitals of all the more densely populated states are located at high altitudes. There are twelve states with a density of more than 45 persons per square mile; their capitals are located at an altitude in excess of 4,600 feet. There are eight states with a population density of more than 60 inhabitants per square mile, and

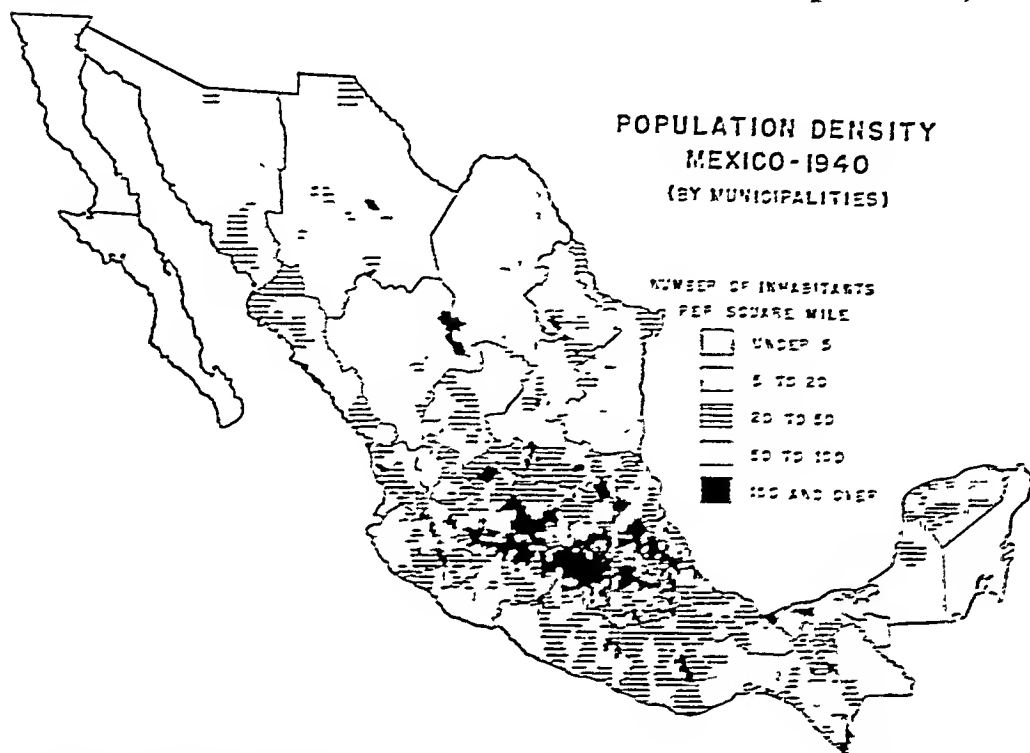


FIG. 8.—Density of population in Mexico, by minor civil divisions. Data from *Censo de población (1940)* (Dirección General de Estadística).

their state capitals are located at more than 6,000 feet above sea level, with the exception of the capital of the state of Morelos. The population density of Mexico is shown by minor civil divisions in Figure 8.

The concentration of population at the higher altitudes is due to a wide variety of factors, among which is the fear that people have of the various tropical diseases. The central highlands have a more comfortable climate and are regarded generally as having a much more healthful environment than the lower tropical areas have. For this reason most of the coastal fringes are less densely populated than are many of the inland areas with higher elevations. Another important factor is the amount of rainfall and its seasonal distribution (Fig. 3). Not only is the Central Mesa higher than most other

areas of Mexico, but, except for some of the coastal areas, it is also more humid. Population settlements tend to avoid the vast semiarid regions of the north and to cluster in the more humid regions of the Central Mesa. For this reason some of the northern states are thinly populated even though they are located at comparatively high altitudes. Such is the case in the states of San Luis Potosí, Zacatecas, Durango, Coahuila, and Chihuahua.

Anthropological evidence seems to indicate that the Indian tribes which inhabited Mexico when the Spaniards arrived had at some previous time migrated from the north. If this is true, the more humid Mexico Valley and other basins in the central area must have looked attractive to them after passing over the semiarid plains of northern Mexico. Whether for this reason or for some other, they ended their migrations in the central area and established their principal settlements there. The Central Mesa was therefore the most densely settled when the Spaniards arrived, and it has remained so to the present time.

The present heavy concentration of population in the central highlands is emphasized by the following facts: (1) There are 13 cities in Mexico having more than 50,000 inhabitants and 6 of them are situated in the Central Mesa, which has only 14.1 per cent of the total land area. (2) There are 97 cities having a population of more than 10,000 inhabitants and 40 of these are located in the Central Mesa. (3) There are 12,757,711 inhabitants of Mexico who live in rural areas or centers having less than 2,500 inhabitants, and 42.9 per cent of these live in the Central Mesa.

Although the greatest density of population is found in the central region, other areas have registered greater proportionate increases in recent years (Table 5). Except for the Distrito Federal and the adjoining state of Morelos in the central region, both of which registered large increases, the states showing the greatest relative increases from 1930 to 1940 are sparsely settled areas situated near the frontiers of the United States and Guatemala. Of the 14 states which registered increases of more than 20 per cent, 7 are located in the regions of the north Pacific and the north, while three border on Guatemala. One of the largest increases (63.3 per cent) was in Baja California Norte, bordering on California. This was probably due to the agrarian program, which attracted to the area Mexicans living in the United States as well as some from other parts of Mexico. Several of these northern states undoubtedly received considerable numbers of Mexicans returning from the United States during the 1930's because

of the economic depression. One fairly large colony of repatriated Mexicans was established at Matamoros in the state of Tamaulipas, just across the border from Brownsville, Texas. Increases in Coahuila, Chihuahua, and Sinaloa were probably due in part to the agrarian programs, which tempted seasonal workers from other states to become permanent residents in order to benefit from the programs.

TABLE 5
INCREASE IN THE POPULATION OF MEXICO FROM 1930 TO 1940
BY REGIONS AND STATES*

Region and State	Population (1930)	Population (1940)	Increase in Population (1930-40)	Percentage Increase (1930-40)
North Pacific.....	975,029	1,204,073	229,044	23.5
Baja California N.	48,327	78,907	30,580	63.3
Baja California S....	47,089	51,471	4,382	9.3
Nayarit.....	167,724	216,698	48,974	29.2
Sinaloa.....	395,618	492,821	97,203	24.6
Sonora.....	316,271	364,176	47,905	15.1
North.....	3,132,989	3,902,685	769,696	24.6
Coahuila....	436,425	550,717	114,292	26.2
Chihuahua....	491,792	623,944	132,152	26.9
Durango.....	404,364	483,829	79,465	19.7
Nuevo León ..	417,491	541,147	123,656	29.6
San Luis Potosí ..	579,831	678,779	98,948	17.1
Tamaulipas ..	344,039	458,832	114,793	33.4
Zacatecas.....	459,047	565,437	106,390	23.2
Central.....	8,043,897	9,430,099	1,386,112	17.2
Aguascalientes ..	132,900	161,693	28,793	21.7
Distrito Federal ..	1,229,576	1,757,539	527,964	42.9
Guanajuato ..	987,801	1,046,499	58,698	5.9
Hidalgo....	677,772	771,818	94,046	13.9
Jalisco....	1,255,246	1,418,310	162,064	13.0
México.....	990,112	1,146,034	155,922	15.7
Michoacán ..	1,048,331	1,182,093	133,762	12.7
Morelos....	132,058	182,711	50,653	38.3
Puebla.....	1,150,425	1,294,629	144,204	12.5
Querétaro ..	224,058	244,787	20,729	9.2
Tlaxcala.....	205,453	224,633	19,180	9.3
Gulf.....	2,082,662	2,432,539	349,877	16.8
Campeche.....	84,639	99,459	14,820	17.5
Quintana Roo ..	10,629	15,752	5,123	48.2
Tabasco....	224,622	285,639	61,017	27.2
Veracruz....	1,377,233	1,619,333	242,100	17.6
Yucatán....	336,026	418,219	82,193	24.4
South Pacific ..	2,318,145	2,554,335	236,190	10.2
Colima....	61,923	78,595	16,672	27.0
Chiapas.....	523,923	672,525	148,602	28.4
Guerrero....	641,639	732,219	90,580	14.1
Oaxaca.....	1,024,549	1,122,724	98,175	9.6
Total.....	16,552,722	19,653,552	3,100,830	18.7

* Data from *Quinto censo de población (1930)* and *Sexto censo de población (1940)*. Dirección General de Estadística).

The contrast in the rurality of the two types of communities becomes apparent when one compares the proportion of the total population engaged in agriculture. In the United States, although 43.5 per cent of the total population are classified as rural, in that they live in localities with less than 2,500 inhabitants, only 18.8 per cent of all gainfully employed persons are engaged in agriculture as an occupation. In Mexico, by contrast, 64.9 per cent of the total population live in localities with less than 2,500 inhabitants and almost exactly the same proportion of the total gainfully employed population is engaged in agriculture (65.4 per cent). The author is of the opinion that in Mexico a more logical definition of "rural" would include at least all persons living in localities having less than 5,000 inhabitants. This would classify as rural 72.5 per cent of the total inhabitants of Mexico (Appen. A, Table 4). The percentage would be slightly larger than the proportion engaged in agriculture, but it is natural to expect that a few persons engaged in nonfarming activities would be living among the farm people. One could even present a very good case for using 10,000 as the dividing line between rural and urban in Mexico, classifying as rural all persons living in localities with less than 10,000 inhabitants. This would include 78.1 per cent of the total population. Many communities reporting a population of about 10,000 inhabitants are little more than a collection of farm villages. This is suggested from the fact that 82.8 per cent of all gainfully employed persons living in places of less than 10,000 inhabitants are engaged in agriculture, while only 17.2 per cent are engaged in non-agricultural occupations. Even in cities having a population of over 10,000 inhabitants, one out of every twelve gainfully employed persons is engaged in agriculture (8.2 per cent).

Unfortunately, the 1940 census data on population are tabulated only by municipalities and states. There is no breakdown according to rural-urban residence. Separate tabulations have been made for all cities having more than 10,000 inhabitants. Through a process of subtraction, therefore, we are able to present most of the data according to the following breakdown: (1) cities having more than 10,000 inhabitants; (2) localities with 10,000 inhabitants or less (including the rural population); (3) the total population, including both of the foregoing groups; (4) special tabulations in a few instances, for localities having less than 2,500 inhabitants and for other groupings, secured through the courtesy of the Mexican census officials.

As we have noted, roughly two-thirds of the total economically active population are engaged in agriculture (Appen. A, Table 5).

This is a higher proportion than is found in many of the other Latin-American countries. For example, it is estimated that in Argentina only 25 per cent are engaged in agriculture; in Cuba, 42 per cent; in Chile, 45 per cent; in Venezuela, 51 per cent; in Panama, 58 per cent; but in Brazil, 65-70 per cent.

The proportion engaged in agriculture in Mexico varies by regions from 58.8 per cent in the central region, where most of the larger cities are located, to 25 per cent in the south Pacific region, where

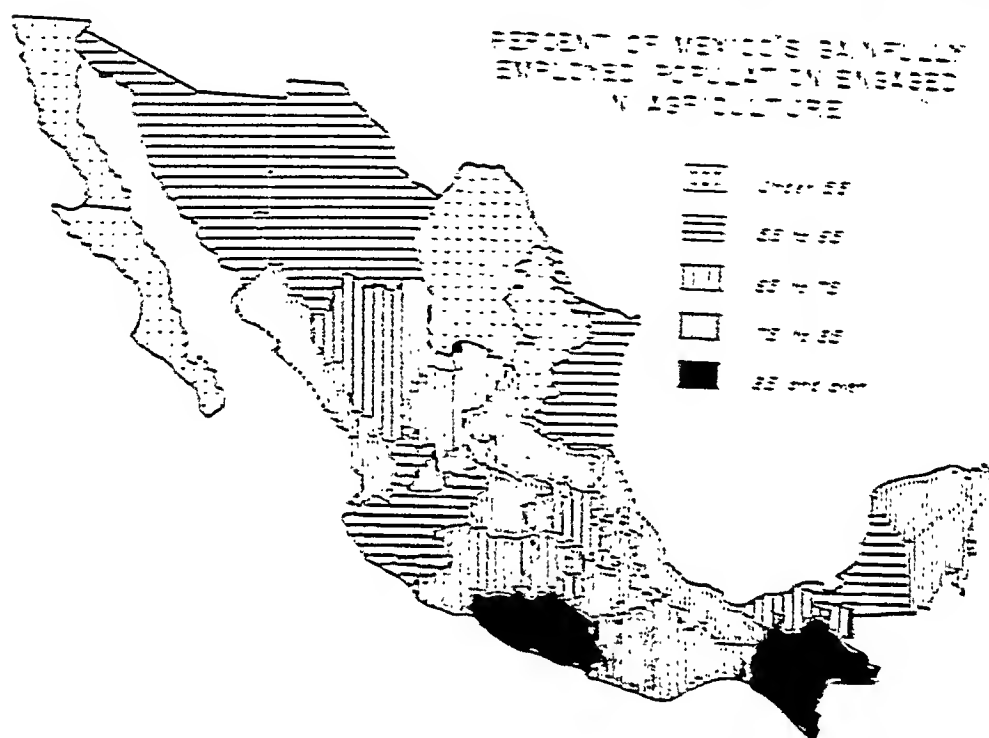


FIG. 10.—Proportion of Mexico's gainfully employed population engaged in agriculture, by states. Based on Appendix A, Table 3.

relatively few cities are found. There are twelve states in which more than three-fourths of the gainfully employed are working in agriculture; on the other hand, there is no state in which the proportion falls below 50 per cent, except the Distrito Federal, which contains Mexico City. Even in the cities there are a great many people who till the soil for a living. Of the population living in cities with more than 10,000 inhabitants, the proportion engaged in agriculture varies from 6.1 per cent in the central region to 25.1 per cent in the south Pacific region.

Even the above data do not give an adequate indication of the role which agriculture plays in the lives of the people. Many of those whose principal occupation is not farming are closely bound to agri-

culture by a variety of ties. Some carry on part-time farming activities in addition to their regular nonfarm jobs. In Mexico City the author was able to look from his office window on the top floor of the Imperial Building on the Paseo de la Reforma and see chickens, turkeys, and ducks quartered on the rooftops of the buildings across the street of Calle Morelos; and his neighbors, who live in Mexico City's most beautiful residential district, Las Lomas de Chapultepec, keep chickens and turkeys in their back yards. On one particular morning the author and his family were awakened at the break of dawn by the squealing of a pig that was being slaughtered across the street. When one is traveling from one town to another in a second-class bus—sometimes there is no other—he is likely to be impressed by the im-

TABLE 6
PROPORTION OF THE TOTAL POPULATION OF MEXICO LIVING IN COMMUNITIES OF VARYING SIZE, 1921, 1930, AND 1940*

SIZE OF COMMUNITY (No. of Persons)	1921		1930		1940	
	No. of Inhabitants	Per Cent	No. of Inhabitants	Per Cent	No. of Inhabitants	Per Cent
2,500 or less	9,795,890	68.3	11,011,725	66.5	12,756,883	64.9
2,501-5,000	1,173,023	8.2	1,308,765	7.9	1,486,648	7.6
Over 5,000	3,365,867	23.5	4,232,232	25.6	5,410,021	27.5
Total	14,334,780	100.0	16,552,722	100.0	19,653,552	100.0

* Data from Dirección General de Estadística.

portance which agriculture plays in the scheme of things. Peasants sitting next to him may be holding live chickens on their laps; and it is not unusual to have the bus stop while men hoist a live hog to the top of it.

DIFFERENTIAL RURAL-URBAN GROWTH

As indicated previously, Mexico's population is growing rapidly. It is increasing faster in the urban than in the rural areas. The comparative growth is shown in Table 6 for the census years 1921, 1930, and 1940 for three types of communities: those having 2,500 inhabitants or less, those with 2,501-5,000, and those with over 5,000. The total number of inhabitants in each category increased considerably in 1930 and 1940. The relative increase each census year, however, was greater for the larger communities with more than 5,000 inhabitants than for either of the other smaller groups of communities. The proportion of the total number of inhabitants living in these

larger communities increased from 23.5 per cent in 1921 to 27.5 per cent in 1940. The percentage in the smaller communities declined.

From 1930 to 1940 the increase in population in cities of over 10,000 inhabitants was 26.1 per cent, in comparison with 16.8 per cent for the localities with less than 10,000 (Appen. A, Table 6). The relative increase varies greatly from one state and region to another. In the south Pacific region there was actually a net loss in the population of the cities. This is attributable to the states of Chiapas and Oaxaca, in both of which the number of inhabitants living in centers with more than 10,000 inhabitants was actually less than the number recorded in 1930. The state of Durango in the north also shows a net loss of 2.3 per cent in the cities. In all other states there were increases of widely varying amounts. In five states the percentage increase in the cities exceeded 40 per cent—Morelos, 67.8 per cent; Tabasco, 63.1 per cent; Baja California Norte, 51.8 per cent; the Distrito Federal, 43.2 per cent; and Nuevo León, 40.4 per cent. For localities with less than 10,000 inhabitants there are three states or territories in which the increase exceeds 40 per cent—Guerrero, 76.8 per cent; Baja California Norte, 73.9 per cent; and the Distrito Federal, 64.6 per cent.

While the largest proportionate increase in population for the country as a whole is found in the cities, it should be remembered that by far the largest actual increase is found in the localities under 10,000. This is because the total number of inhabitants living in these smaller localities is so much greater than the number living in the cities, that a much greater absolute increase is realized with a much smaller relative increase. Thus the total population increase in Mexico during the decade 1930-40 consisted of 2,255,338 inhabitants. Of these, 2,209,194, or 71.3 per cent, were in localities with less than 10,000 inhabitants, while only 55,144, or 2.5 per cent, were in places with more than 10,000. The contribution of the smaller communities to the total population increase of the nation is emphasized when we consider that of the total increase, 38.3 per cent was in the cities, with less than 2,500 inhabitants as compared with 1.7 per cent for all other localities.¹¹

MOVEMENT OF THE POPULATION

Although Mexico is still overwhelmingly rural in character, definite signs of urbanization have been appearing. The growth of Mexico City, Guadalajara, and Monterrey

Mexico City has achieved phenomenal growth in recent years.

11. Special tabulation of data from *Quinto Censo de Población*.

People have crowded into it from all parts of the country. Entirely new suburbs have sprung into existence almost overnight. Part of its growth has been occasioned by the social unrest pursuant to the agrarian program. Many of the former landowners and their families and friends have moved to the city and have invested their savings in urban real estate and in commercial and industrial concerns. It is estimated that Mexico City as of June, 1944, had a population of 1,699,955 inhabitants. This would represent an increase of 64 per cent over its population of 1930, which was 1,036,637. In 1910, Mexico City had but 467,384 inhabitants. This is only 27 per cent of the population which the city contained in 1944.

Mexico City has all the earmarks of a luxurious, modern metropolis, with its beautiful parks, modern boulevards, and attractive suburban residences. With some degree of justification it has been acclaimed by many as one of the most beautiful cities in the world. It encompasses the most striking contrasts, however. One finds pre-Columbian and ultra-modern customs and techniques of living existing side by side without very much of a blending of the two. On the beautiful boulevard Paseo de la Reforma, designed and constructed under Emperor Maximilian, may be observed the most modern of automobiles, including Cadillacs, Lincolns, and Rolls Royces, and among these, weaving in and out of traffic, may be seen barefooted Indians serving as human beasts of burden, carrying on their backs heavy loads weighing one, two, or three hundred pounds (see Pls. III and IV).

LOCALITY GROUPS—POLITICAL CATEGORIES

The Mexican census carries a list of about one hundred categories, into which are classified all the 105,185 populated localities found in Mexico. These are referred to as *categorías políticas* ("political categories") (Table 7). In the nine categories listed are to be found 94 per cent of all localities and 94 per cent of the total population.

Originally, these categories had a rather definite meaning, each referring to a particular type of community; but when the community changed in function, it often continued to be listed by the census under the same category in the traditional manner. One cannot be sure, therefore, that the category into which any given community is classified today is a true indication of its function; but because these categories appear in official statistics and will be encountered by the student of rural life in Mexico at almost every turn, it seems advisable to discuss them in some detail. The nine most important political categories, in order of importance, are as follows:

1. *The ciudad* ("city").—This category is usually applied to centers large enough to be of considerable importance politically and commercially. However, there is no specified size at which a community becomes a *ciudad*, and there is considerable variation from state to state. The average size of *ciudades* for the country as a whole is 16,614 inhabitants, but there are five states in which the average size is only between 4,000 and 5,000. Within any given state the *ciudades* are likely to include the largest centers in the state.

2. *The villa*.—The term "villa" was originally applied to communities founded by the Spaniards in contradistinction to the term

TABLE 7
POPULATED LOCALITIES OF MEXICO CLASSIFIED ACCORDING
TO POLITICAL CATEGORIES*

TYPE OF SETTLEMENT (POLITICAL CATEGORY)	LOCALITIES		INHABITANTS		AVERAGE No. OF INHABITANTS
	No.	Per Cent	No.	Per Cent	
<i>Ciudades</i> (cities).....	310	0.3	5,150,317	26.2	16,614
<i>Villas</i>	531	0.5	1,268,759	6.5	2,389
<i>Pueblos</i>	5,377	5.1	4,631,313	23.6	861
<i>Unidades industriales</i>	113	0.1	40,223	0.2	356
<i>Congregaciones</i>	3,744	3.6	1,106,433	5.6	296
<i>Ejidos</i>	4,029	3.8	881,218	4.5	219
<i>Haciendas</i>	5,069	4.8	811,168	4.1	160
<i>Rancharías</i>	11,711	11.1	1,539,358	7.8	131
<i>Ranchos</i>	67,646	64.3	3,026,327	15.4	45
<i>Others</i>	6,655	6.3	1,198,436	6.1	180
Total.....	105,185	100.0	19,653,552	100.0	187

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

"pueblo," which was applied to the Indian settlements. Gradually, the term has come to denote size and is usually applied to settlements next in size and importance to the *ciudad*. The average villa contains 2,389 persons. There are four states which have no localities classified as villas.

3. *The pueblo*.—The term "pueblo" ("town") was originally applied by the Spaniards to the Indian settlements, but more recently it has tended to denote political importance more than anything else. The average pueblo has 861 inhabitants, although the number varies greatly from one state to another—from 229 inhabitants in Quintana Roo to 3,729 in Baja California Norte. The two states of Coahuila and Tamaulipas have no localities listed as pueblos.

4. *The unidad industrial* ("industrial unit").—As the name would imply, these are rural industrial establishments with resident workers

and their families located at some distance from any center of population. The average locality of this type contains 356 persons in density. These units are found in only nineteen of the thirty-two states.

5. *The congregación* ("congregation").—This term was originally applied to communities composed largely of former migratory Indians which were grouped into relatively permanent settlements by Spaniards. Later the term was used to refer to many of the villages in which the lands were held in common. At present the term has almost all but its historical significance. There are more than a million inhabitants living in places designated as *congregaciones*. On the average, each *congregación* contains 296 persons.

6. *The ejido*.—The term "ejido"¹¹ now refers to communities which have received land under the Agrarian Laws growing out of the Mexican Revolution of 1910 and first enacted in 1915. Table 7 lists only 4 ejidos, but, since there were 14,683 ejidos in the Republic in 1940 (chap. ix), the few here listed undoubtedly refer largely to the communities which have been established as a result of the Agrarian Laws and which did not previously fall into any other category.

7. *The hacienda*.—Haciendas are large landed estates containing communities of resident workers. The average number of persons on a hacienda is 160. In the author's opinion, it would be unsafe to accept the figure listed in Table 7 (5,069) as the total number of haciendas existing in Mexico in 1940 because of the practice of listing a locality in the same category long after its functions have been changed. It is quite likely that villages may still be listed as haciendas long after the land has been distributed to the workers and the hacienda has ceased to exist. In Baja California Norte, for example, the census lists two haciendas with a total population of only three persons each. Since the hacienda by definition has a fairly large number of resident workers, it seems obvious that the term "hacienda" has continued to be attributed to these localities even though they have completely changed in nature and function. Furthermore, in a few of the southern states, such as Chiapas and Tabasco, the term *fincas* is often used instead of "hacienda."

8. *The ranchería*.—As Simpson says, this term has a variety of meanings. Sometimes it is applied to settlements of independent farmers, and at other times it is used to designate settlements of peons on haciendas, and at still others, communities holding their lands

11. The word "ejido" is used so frequently throughout this book that it will not be italicized. For a more complete definition see chap. ix.

as an isolated farmstead. There are only 26,897 in the Republic, and they account for less than 1 per cent of the total population, or a total of 165,961 individuals. The small proportion living on isolated farmsteads serves to emphasize the prevalence of clustered settlement in rural areas over isolated settlement, in contrast to the United States. In certain parts of Mexico the isolated farmstead is more prevalent

TABLE 8
POPULATED LOCALITIES OF MEXICO CLASSIFIED ACCORDING
TO NUMBER OF INHABITANTS*

TYPE OF LOCALITY GROUP	LOCALITIES		INHABITANTS	
	No.	Per Cent	No.	Per Cent
Isolated farmsteads (pop. 10 or less)	26,897	25.6	165,961	0.8
Hamlets				
Small hamlets (pop. 11- 50)	35,156	33.4	865,056	4.4
Large hamlets (pop. 51-100)	13,623	13.0	972,830	5.0
Total hamlets (pop. 11-100)	48,779	46.4	1,837,886	9.4
Villages				
Small villages (pop. 101-1,000)	26,821	25.5	7,777,020	39.6
Large villages (pop. 1,001-2,500)	1,988	1.9	2,976,016	15.1
Total villages (pop. 101-2,500)	28,809	27.4	10,753,036	54.7
Towns				
Small towns (pop. 2,501-5,000)	438	0.4	1,486,648	7.6
Large towns (pop. 5,001-10,000)	165	0.2	1,101,781	5.6
Total towns (pop. 2,501-10,000)	603	0.6	2,588,429	13.2
Cities				
Small cities (pop. 10,001-25,000)	66	0.1	1,008,528	5.1
Medium cities (pop. 25,001-50,000)	18	0.0	624,920	3.2
Large cities (pop. over 50,000)	13	0.0	2,674,792	13.6
Total cities (pop. over 10,000)	97	0.1	4,308,240	21.9
Total	105,185	100.0	19,653,552	100.0

* Data compiled from *Sexto censo de población* (1940) (Dirección General de Estadística).

than in others; the Toluca Valley west of Mexico City contains a number, and they are found in the north and northwest to a greater extent than farther south. Many of the ejidatarios¹³ in the Mexicali Valley have moved onto their individual plots recently, with the result that the village pattern of settlement is breaking down in that area.

13. The word "ejidatario" is used so frequently throughout this book that it will not be italicized. An ejidatario is a member of an ejido who has been given a grant of land in accordance with agrarian laws (see chap ix).

2. *Hamlets*.—Hamlets range in population from 11 to 100. For convenience, they are divided into two groups—small hamlets having from 11 to 50 inhabitants and large hamlets having from 51 to 100. The hamlets account for 9.4 per cent of the total population, which is divided almost equally between the two types (Fig. 11). In many cases the hamlet is but an extension of the isolated farmstead, in that one or more *jacales* ("huts") for workers and their families may be located on the farm along with the principal farmhouse. Many of these correspond to what would be called a "ranch" in the United States. Some are comparable to a small cluster of houses located at

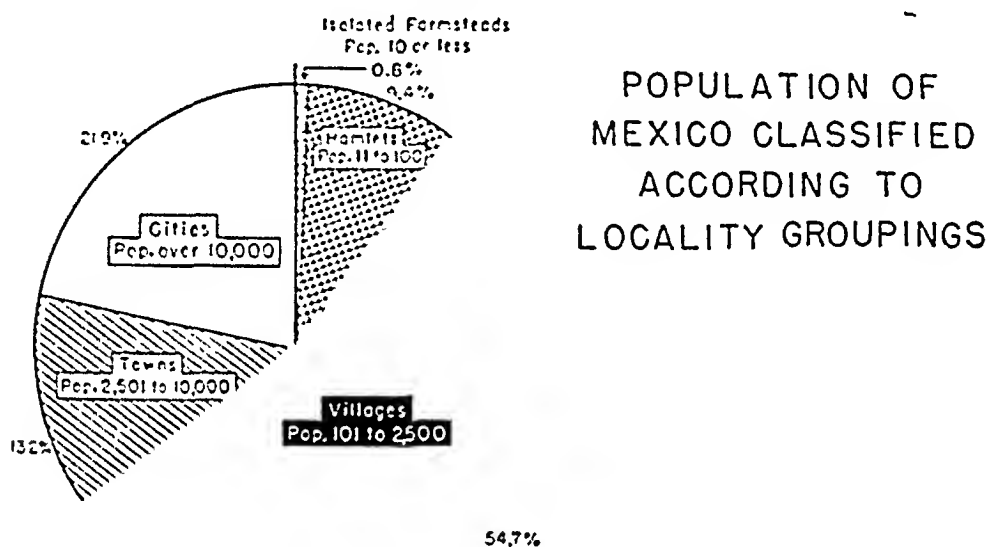


FIG. 11.—Inhabitants of Mexico classified according to size of community in which they live. Based on Table 8.

the crossroads in country districts. Many of the larger hamlets are haciendas, where the huts of the resident peons are grouped about the principal buildings of the hacienda.

3. *Villages*.—Villages are arbitrarily designated as localities whose population varies between 101 and 2,500. They include more than half of Mexico's total population (54.7 per cent). More than two-thirds of these live in the smaller villages ranging from 101 to 1,000 inhabitants, while less than one-third live in the larger villages with a population of 1,001–2,500. It is these villages, whose population is composed chiefly of peasant families, which really typify Mexican rural settlement. In none of the five major regions of the Republic do they account for less than 50 per cent of the total inhabitants of the

region, while in the south Pacific region they account for 74.5 per cent of the total inhabitants.

4. *Towns*.—In this category are placed those communities whose population varies from 2,501 to 10,000 inhabitants. They account for 13.2 per cent of Mexico's total population, with slightly more than half living in small towns of 2,501–5,000 inhabitants and somewhat less than half living in larger towns with 5,001–10,000 inhabitants. The towns are simply larger editions of the villages, except that they contain a smaller proportion of farmers and a larger proportion of persons following nonagricultural pursuits.

5. *Cities*.—The cities include localities having a population of over 10,000 inhabitants. They account for 21.9 per cent of Mexico's total population. Considerably more than half of 21.9 per cent of the population are found in the large cities with more than 50,000 inhabitants, while only about one-fourth are in small cities of 10,001–25,000 inhabitants, and one-seventh in medium-sized cities ranging in population from 25,001 to 50,000. The cities represent a greater degree of occupational specialization than is found in the towns. Nonagricultural occupations predominate, although, as indicated previously, one out of every twelve gainfully employed persons in the cities makes his living from agriculture.

ADVANTAGES AND DISADVANTAGES OF MEXICAN VILLAGE-SETTLEMENT PATTERNS

Since the clustered type of settlement tends to prevail in Mexico, it is well to examine in some detail its relative advantages and disadvantages.¹⁴

ADVANTAGES

The advantages which the Mexican village type of settlement offers to its inhabitants are largely social in nature and may be enumerated as follows:

1. *Protection*.—Mexico has a long history of social and political turmoil, with the consequent result that most peasant families would be afraid to live alone at a distance from neighbors and friends. Even now, life in some sections of Mexico is cheap, and violent deaths are fairly common. The fear which many peasants have is expressed, even

14. For a discussion of the advantages and disadvantages of the farm-village type of settlement as found among the Mormons in Utah see Lowry Nelson, *A Social Survey of Escalante, Utah* ("Brigham Young University Studies," No. 1 [Provo, Utah, 1925]), pp. 41–44.

in the village, by lack of windows in their houses¹⁵ and by the keeping of domestic animals in the same rooms with the family members at night for fear that they may be stolen. This fear would be increased manyfold if families were to move off by themselves, where they could not call for help from neighbors and friends in case of trouble. The village thus offers them greater protection than does the isolated farmstead.

2. *Sociability*.—The village facilitates informal gatherings, such as the play group among children, visiting among adults, and mutual aid in times of trouble, sorrow, or great need. The utter loneliness which exists on the isolated farmstead in a country having few modern transportation and communication facilities seldom occurs in the village, where there are neighbors who play the role of sympathetic listeners in times of trouble and who share the pleasures of one's good fortunes.

3. *Social institutions*.—Certain institutions, such as schools, churches, and farmers' organizations, should have greater relative possibilities for success where the clustered settlement prevails because they would not have to depend upon transportation systems to bring the people in from the scattered farms of the countryside. In a Mexican village all age groups live within easy walking distance of institutional establishments. They could be called together for a meeting within a few minutes, and this should facilitate the development of efficient social organizations.

4. *Social services*.—Water systems, electric lights, telephones, and medical services should be much easier to provide where the clustered settlement prevails, since the clientele would be located within a limited area, thus saving the expense of extending such services from farm to farm throughout the rural districts. Although such services are not widespread in rural Mexico, we must look to factors other than patterns of settlement for the explanation.

DISADVANTAGES

The disadvantages of the Mexican village type of settlement grow largely out of the problems of farm management, although there are a few which might be termed social.

1. The farmer must spend a great deal of time and energy traveling between village and farm. In many cases the mileage involved during the course of the year is very great. If he lived on the farm, this time and energy might go into more productive channels.

15. Lack of windows may also be due partly to fear of the night air (see chap xii).

2. The family that lives on the farm is in a much better position to care for its crops and livestock when care is necessary than is the family that lives in the village away from the farm.

3. When the farm family lives in the village, the livestock are kept there as well. According to the census data of 1940, there were 6,360,616 head of cattle kept in the villages and towns of Mexico. This amounts to 54.5 per cent of all cattle in the Republic. The forage is hauled or carried from the farm to feed the animals in the village, but it never gets back onto the farm in the form of fertilizer. In other words, when the livestock is kept in the village, the fertilizer is spread on the village streets instead of on the farm land. This is not only disadvantageous to agriculture, but it also creates serious problems of sanitation in the village.

4. The assistance with farm work by the various members might be more effective if the family were living on the farm and could do small tasks when they needed to be done instead of having to make special trips to the farm from the village.

From the foregoing, it is obvious that the type of settlement that tends to prevail in rural Mexico has advantages as well as disadvantages, and it is difficult to say which outweighs the other. It is possible that in certain areas a compromise plan of settlement could be worked out, which would incorporate most of the advantages of the village and the isolated farmstead but which would avoid the disadvantages of both. An approximation to such a settlement might be achieved by using what is known as the "line-village" pattern.¹⁶ This would consist of holdings in the form of long, narrow, rectangular strips laid out on either side of a road. The houses would front on the road, and the farm land would extend back from the houses on either side of the road. Instead of situating the houses close together, or adjoining, as is the case in most of the Mexican villages, they would be placed at some distance apart, depending upon the width of the strip of land allotted to each family. Although the dwellings would not be arranged in such compact form as is now the case, they would be accessible to one another, since they would be fronting on the same road, and families would have the advantage of being able to live on the farm and in the village at the same time. An area of land could be reserved near the center of the village for most of the social institutions, including municipal offices, church, school, plaza, and commercial establishments. Where a great deal of land is available, several

16. T. Lynn Smith, *The Sociology of Rural Life* (New York, 1940), chap. xi.

tiers of such streets could be arranged with crossroads connecting them. The Mennonites, who have established colonies in Chihuahua, have worked out an adaptation of the line-village type which appears to be very practicable.¹⁷

This line-village pattern admittedly would be much more adaptable to level country, where comparatively large areas of uniform soil extend contiguously, than to the mountain settlements, where farm land exists only in small patches scattered over the hillsides and valley bottoms. In such areas it probably would not be feasible at all; and unfortunately much of Mexico's terrain is of this type.

Any attempt at widespread reorganization of the village patterns in Mexico would be expensive and of doubtful value; however, attention should be given to village planning when new communities are established. The agrarian program alone has created many new rural communities since 1930. The majority of these have received little or no planning with regard to the location of the homes in relation to the farms or to the spacing of houses and lots with reference to one another. Public agencies might do well to give these matters careful consideration in any new communities to be developed in the future.

Concerning the villages now in existence, attention might well be devoted to making the fullest use of the many advantages that this type of settlement offers. The village-settlement pattern provides an excellent basis for harnessing the human resources of the entire community in programs of rural welfare.

17. See chap viii, the section on "Mennonite Colonies."

The Composition of the Population

RACIAL GROUPS

THE Indian survived in Mexico. After the Conquest he continued to remain the basic element in the population, and rural Mexico is highly Indian, racially and culturally speaking, even at the present time. Just how many Indians there are now and what proportion they form of the total population it is impossible to say, since adequate data for answering this question are lacking. During the three centuries of the colonial period only about 300,000 Spaniards migrated to Mexico.¹ These were mostly males. Many of them mated with Indian women, and the process of race mixture began. It is unlikely that the Spaniards and the creoles together ever constituted as much as 10 per cent of the total population during the colonial period.²

During the sixteenth century some Negro slaves were imported from Africa to work on the sugar plantations and in the mines. Before the end of the century there were said to be more Negroes than Spaniards in Mexico. The latter numbered only 14,711, while there were 18,569 Negroes.³ There were also 1,495 mulattoes, of mixed Spanish and Negro blood, and 2,415 persons of mixed Negro and Indian blood. The Negro population was greatly increased during the seventeenth century by the importation of 120,000 more slaves; but the slaves were freed by the War of Independence (1810-21), and few were imported afterward. As with the Spaniards, the vast majority of the Negroes who came to Mexico were males, and they tended to mate freely with Indian women. This resulted in the mixing of Negro and Indian blood to such a great extent that there are

1. Ernest Gruening, *Mexico and Its Heritage* (New York, 1928), p. 69.

2. Andrés Molina Enríquez, *La Revolución agraria de México* (5 vols.; Mexico City, 1933-37), I, 72.

3. Carlos Basauri, "La Población negroide mexicana," *Estadística*, December, 1943, pp. 96-107.

very few pure-blood Negroes left in Mexico today. Most of the few Negroes that have survived are located along the *costa chica*. This is the Pacific coastal area extending along southern Mexico from Acapulco, in the state of Guerrero, to Puerto Angel in the state of Oaxaca. It is estimated that there are from 10,000 to 14,000 Negroes in this area.⁴ There are also a few Negroes in the coastal areas of Veracruz and Quintana Roo.

While there are very few Negroes of pure blood in Mexico at the present time, there are probably several hundred thousand persons who have various degrees of Negro blood in their veins. These, also, are found mostly along the *costa chica* of Guerrero and Oaxaca. No data are available that would indicate the exact number, but there are probably from 100,000 to 300,000.

During the colonial period social, political, and economic distinctions were made on the basis of race, and a modified form of caste system developed. The Spaniards born in Spain, often referred to as *gachupines*, occupied the top position on the social ladder, holding the most important positions of prestige and influence. Their descendants born in Mexico of strictly Spanish parents were referred to as "creoles" and were considered somewhat inferior to the *gachupines*. They were permitted to hold large landed estates and enjoyed economic security, but they were discriminated against when it came to the matter of holding public office or other positions of power and influence. Discrimination against them was said to be justified on the grounds that the American environment tended to cause degeneration.⁵ Persons of mixed blood were referred to as "mestizos" and occupied a position on the social ladder much lower than either the *gachupines* or the creoles but somewhat above the Indian masses, who were exploited as members of an inferior race, as were the Negroes. An elaborate system of sixteen categories was devised for distinguishing between various degrees and combinations of mixed bloods. The complete classification of races attempted during this early period is shown below. The various categories are listed in descending order, according to the relative prestige which they were imputed to have had.

I. *Gachupines*: Spaniards born in Spain

II. Creoles: pure descendants of *gachupines* born in Mexico

4. Carlos Basauri, *La Población indígena de México* (3 vols.; Mexico City, 1940), III, 674.

5. Henry Bamford Parkes, *A History of Mexico* (Boston, 1938), p. 116.

III. Persons of mixed blood:⁶

1. *Mestizo*: born of one Spanish and one Indian parent
2. *Castizo*: born of one mestizo and one Spanish parent
3. *Spaniard*: born of one *castizo* and one Spanish parent
4. *Mulatto*: born of one Spanish and one Negro parent
5. *Morisco*: born of one Spanish and one mulatto parent
6. *Albino*: born of one Spanish and one *morisco* parent
7. *Torna-atrás*: born of one Spanish and one *albino* parent
8. *Lobo*: born of one Indian and one *torna-atrás* parent
9. *Sambaigo*: born of one *lobo* and one Indian parent
10. *Cambujo*: born of one *sambaigo* and one Indian parent
11. *Albarazado*: born of one *cambujo* and one mulatto parent
12. *Baroino*: born of one *albarazado* and one mulatto parent
13. *Coyote*: born of one *baroino* and one mulatto parent
14. *Chamizo*: born of one *coyote* and one Indian parent
15. *Coyote-Mestizo*: born of one *chamizo* and one mestizo parent
16. *Ahi-te-estás*: born of one *coyote-mestizo* and one mulatto parent

IV. Indians: pure-bloods

V. Negroes: pure-bloods

Such fine distinctions were obviously impossible to maintain with any degree of accuracy, especially after race mixture became fairly widespread. Gradually the system began to break down, and the war of independence went far toward obliterating official recognition of racial distinctions. Since 1921 the population censuses of Mexico have ignored the matter of race. It is argued that social stratification now tends to be based on cultural and economic considerations and that race as such is no barrier to social or economic progress. There is now little discrimination based on color alone. An Indian is looked down upon only if he *lives* like an Indian on a comparatively low economic and cultural plane as judged by modern standards. If he sloughs off his Indian language, if he exchanges his *huaraches* ("sandals") and his Indian costume for modern dress, and if he moves from his *jacal* ("hut") into a house, he is no longer looked down upon as a member of an inferior group. While there may be some tendency for persons with white skins to shy away from marriage with persons having very dark skins, such marriages ordinarily do not encounter social disapproval, and the choice of a mate is much more likely to be based upon other considerations. For this reason, what is referred to as the "Indian problem" in Mexico is rapidly coming to be regarded as a social and cultural, rather than a racial, problem.

Perhaps an equally important reason for abandoning attempts at

6. Molina Enríquez, *op. cit.*, p. 115.

racial classification by the Mexican census is to be found in the difficulty encountered in distinguishing one racial group from another. In areas where the Indian languages have disappeared and where race mixture is widespread, the color and features of the Indian shade so gradually into those of the mestizo and the white that it is impossible for an enumerator to distinguish between them. In such areas the inhabitants themselves do not know how much racial mixture has taken place among their ancestry. Public officials are therefore of the opinion that statistics on race represent little more than crude estimates and have very little reliability or utility. The latest data available on race are from the 1921 census and give the racial proportions for the total population as follows: whites, 10.3 per cent; mestizos, 60.5 per cent; and Indians, 29.2 per cent.

It is probable that these figures are biased in the direction of the lighter color. A mestizo with a light complexion might well claim to be of white ancestry; and many Indians might claim to be mestizos, especially if they reside in areas where the mestizos and whites are regarded as occupying a higher position of prestige. The author is of the opinion that the above data underestimate the proportion of Indians and exaggerate the proportion of other groups in the population. Even if we accept the data at their face value, the proportion of Indian blood would probably be greatly understated, since the vast majority of the mestizos probably have a much higher proportion of Indian than of white blood. As Redfield suggests, it is easier to estimate the proportion of Indian blood among the population than to count the Indians; and he estimates that at least 75 per cent of the total population of Mexico has a greater proportion of Indian than of white blood.⁷ Nevertheless, the proportion of Indian blood is lower in Mexico than in Guatemala, Bolivia, Peru, and Ecuador; although it is considerably higher than in most of the other countries of Latin America.

Up to this point we have been referring to the Indians as if they were a homogeneous group by themselves. If such were the case, Mexico's "Indian problem" would be far easier to solve. Unfortunately, no such homogeneity exists. When Cortés landed in Mexico, he found not only the Aztecs and Mayas, about whom most people have read, but he also encountered several hundred other Indian tribes of whom the average reader has never heard. The historian, Orozco :

7. Robert Redfield, "The Indian in Mexico," *Annals of the American Academy of Political and Social Science*, CCVIII (March, 1949), 132.

Berra, listed and identified more than seven hundred of these tribal groups.⁸ According to language, they were divided into about a dozen distinct linguistic families. Within these linguistic families there were from fifty to one hundred different languages and dialects.⁹ Not only did these various groups have different languages, but they differed as to customs, traditions, and general cultural development. As Simpson says:

Some of these tribes, like the Aztecs whom many grudgingly acknowledged as master, had reached relatively high stages of development. Others were of the most primitive type of wandering groups snatching a meager and precarious living from forest and stream. But each of these tribes—and this is the important point to note—differed in greater or less degree one from the other. Their religious beliefs and practices were unlike, their economic organizations were dissimilar, their social systems were diverse. . . . In short, at the time of the Conquest, Mexico was an agglomeration of culturally disparate groups, scattered over a vast area and, except for the loosely held together Aztec Confederacy, either, for all practical purposes, isolated, or having only such contacts as those involved in warfare or desultory and intermittent trade.¹⁰

The important point, which we wish to emphasize in this discussion, is that many of these linguistically separate groups have continued almost as separate little worlds, culturally, right down to the present time. The census of 1940 had to be taken in fifty different languages. This census shows that there are 1,237,018 persons five years of age and over living in Mexico (about one person out of every fourteen in the entire Republic) who speak nothing but Indian languages (Table 9). In localities which have a population of less than 10,000 inhabitants, almost one person out of every ten (9.5 per cent) speaks only an Indian language. A list of the thirty-four principal Indian languages spoken exclusively by inhabitants in 1940 is given in Table 10, together with the number of inhabitants speaking each. From this table one gets a vivid impression of the nature of the educational problem involved in attempting to incorporate these linguistically separate groups into the national life. Most of them live in rural areas, many of them isolated communities that are inaccessible except by muleback. They cannot be approached through the official language of the country (Spanish) nor through any one

8. Molina Enriquez, *op. cit.*, p. 38.

9. Eyler N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, 1937), p. 232.

10. *Ibid.* Reprinted from *The Ejido: Mexico's Way Out* by Eyler N. Simpson by permission of the University of North Carolina Press. Copyright, 1937, by the University of North Carolina Press.

Indian language. Practically all are illiterate and can be influenced only by the spoken word, each in his own particular Indian dialect.

The problem is even more complex than description thus far would indicate, since many of the other 1,253,891 individuals reported by the census as speaking Indian languages and also Spanish probably have only a superficial knowledge of Spanish. Many investigators have reported that persons who speak Indian languages and who also claim to speak Spanish often understand but a few words of the latter

TABLE 9

POPULATION OF MEXICO, FIVE YEARS OF AGE AND OVER, CLASSIFIED ACCORDING TO WHETHER OR NOT THEY SPEAK INDIAN LANGUAGES BY SIZE OF COMMUNITY*

LANGUAGE GROUP	TOTAL POPULATION 5 YEARS OF AGE AND OVER		POPULATION 5 YEARS OF AGE AND OVER, LIVING IN LOCALITIES OF OVER 10,000 INHABITANTS		POPULATION 5 YEARS OF AGE AND OVER, LIVING IN LOCALITIES OF 10,000 OR LESS INHABITANTS	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Speaking Indian languages exclusively	1,237,018	7.4	7,472	0.2	1,229,546	9.5
Speaking Indian languages and other languages.....	1,253,891	7.5	42,846	1.1	1,211,045	9.3
Total speaking Indian languages...	2,490,909	14.8	50,318	1.3	2,440,591	18.8
Speaking only non-Indian languages.	14,297,751	85.2	3,742,161	98.7	10,555,590	81.2
Total..	16,788,660	100.0	3,792,479	100.0	12,996,181	100.0

* Data from *Sexto censo de población* (1930) (Dirección General de Estadística).

language. Thus the census of 1930 reported that 47 per cent of the Tarahumaras spoke Spanish; but Bennett, an anthropologist who studied them carefully, estimated that not more than 10 per cent of the mountain Tarahumaras (the largest group) could speak Spanish with any fluency.¹¹ If we add those persons who are reported to speak Indian languages as well as Spanish to those speaking only Indian languages (Table 9), we get a total of 2,490,909 individuals, 14.8 per cent of the total population five years of age and over. In localities having less than 10,000 inhabitants the percentage speaking Indian languages is 18.8, or almost one individual out of every five. The per-

11. Related in Redfield, *op. cit.*, p. 134.

centage of the total population speaking Indian languages varies greatly in different sections of the country (Appen. A, Tables 7 and 8). The largest percentage is found in the south Pacific region, where it reaches 38.2 per cent of the population. Nearly one-fourth of the inhabitants in this region (23.3 per cent) speak nothing but Indian languages. By states, the largest proportions speaking only Indian languages are Oaxaca with 31.7 per cent, Yucatán with 27.4, and Chiapas with 21.3. The proportion of the population speaking Indian languages is shown by municipalities in Figure 12.

TABLE 10
POPULATION OF MEXICO, FIVE YEARS OF AGE AND OVER
SPEAKING INDIAN LANGUAGES EXCLUSIVELY, CLASSI-
FIED ACCORDING TO LANGUAGE SPOKEN*

Language Spoken	No. of Persons	Percentage of Total
Mexicano or Nahuatl.....	300,071	20.11
Mixteco.....	124,094	10.10
Maya.....	114,011	9.22
Zapoteco.....	104,601	8.46
Otomí.....	87,404	7.07
Totonaco.....	59,242	4.79
Mazateco.....	55,743	4.51
Tzotzil.....	40,194	3.98
Mazahua.....	39,587	3.20
Tzendal or Tzeltal.....	34,502	2.70
Mixe.....	27,238	2.20
Huasteco.....	25,028	2.07
Chinanteco.....	20,387	1.65
Tarasco.....	19,637	1.59
Chol.....	19,499	1.58
Tlapaneco.....	14,411	1.16
Tarahumar.....	11,717	0.95
Chatino.....	8,586	0.69
Amusgo.....	7,540	0.61
Tejelabal.....	6,882	0.56
Mayo.....	6,667	0.54
Zoque.....	6,581	0.53
Popoloca.....	6,298	0.51
Chontal.....	5,624	0.45
Cuicateco.....	4,261	0.34
Mame.....	2,555	0.21
Corá.....	1,724	0.14
Tepehuano.....	1,520	0.12
Chichimeca.....	940	0.08
Huichol.....	795	0.06
Tepehua.....	733	0.06
Yaqui.....	307	0.02
Matlalzinea or Pirinda.....	123	0.01
Pápago.....	91	0.01
Others (sixteen).....	7,865	0.64
Total.....	1,237,018	100.00

* Data from *Séptimo censo de población* (1940) (Dirección General de Estadística)

From the foregoing, it should now be apparent that the Indians in Mexico constitute heterogeneous groups differing widely from one another in language, traditions, and cultural characteristics. In southern Mexico there are markets where Indians meet who speak languages as different from one another as are English, Chinese, and Hebrew.¹² The "Indian problem" involves, therefore, the breaking-down of numerous barriers which separate these indigenous groups

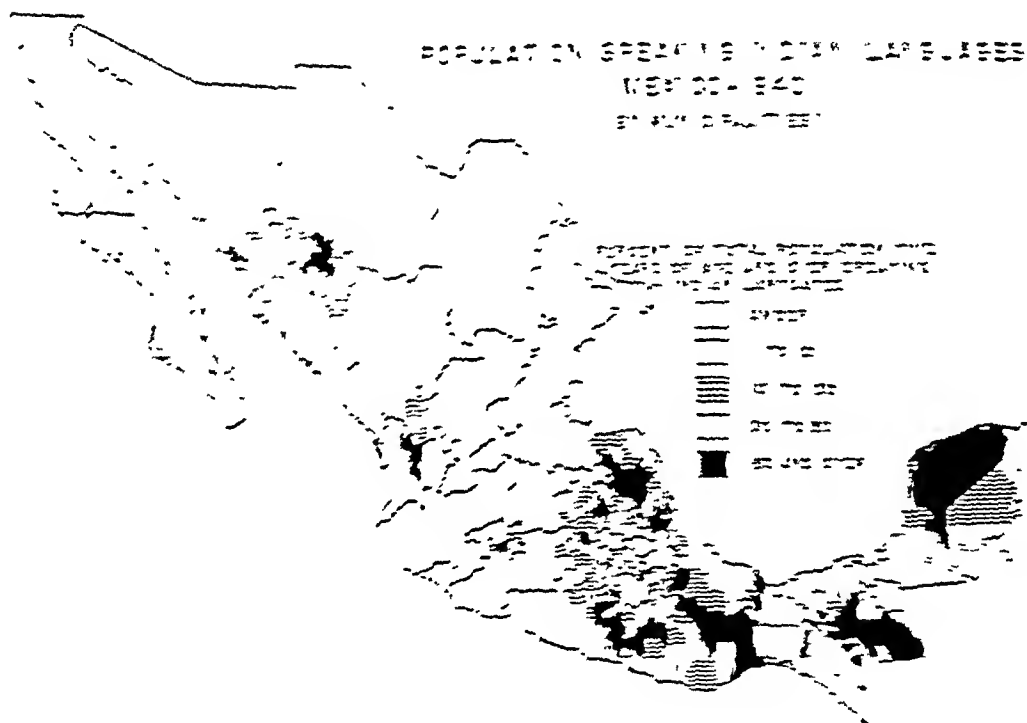


FIG. 12.—Percentage of Mexico's population five years of age and over speaking Indian languages by state and division. Data from *Year Book of Statistics*, 1942, Statistical General de Mexico, 1942.

into numerous little isolated "worlds" of their own and which prevent them from developing a feeling of identity with the life and traditions of the nation as a whole. This involves not only the teaching of Spanish so that the various groups will have a common medium for communicating with one another but also the stimulation of transportation facilities so that contacts can be established among them. In short, Mexico's "Indian problem" involves the development of ways and means of weaving into a nation the numerous isolated and separate little societies into which the country is divided.¹³

¹² *Ibid.*, p. 185.

¹³ *Ibid.*, pp. 177-178.

NATIVITY GROUPS

In comparison with the United States, Mexico has a very low proportion of foreign-born among its population. Less than 1 per cent (0.9) of the total population living in Mexico in 1940 were born outside its national borders, as compared with 8.8 per cent for the United States. In twelve states, located principally in the southern part of the country, as many as 95 per cent, or more, of the total population were born in the same state in which they now reside (Fig. 13



FIG. 13.—Percentage of Mexico's total population residing in the state of birth in 1940. Based on Appendix A, Table 9.

and Appen. A, Table 9). In only four states or territories is the percentage less than 75: (1) Baja California Norte, which extends southward from California, with only 39.6 per cent; (2) the Distrito Federal, containing the city of Mexico with 50.6 per cent; (3) the territory of Quintana Roo, where a seminomadic type of agriculture exists—chicle-gathering from the forests—with 60.2 per cent; and (4) the state of Tamaulipas, fronting on the United States border, with 72.4 per cent. In all other states the proportion of the inhabitants born in the state in which they now reside exceeds 75 per cent of the total population. The data on nativity for both Mexico and the United States according to size of community are given in Table 11.

The following relationships may be noted:

1. The foreign-born population of Mexico is located principally in the cities. Only one-half of 1 per cent in localities having less than 10,000 inhabitants are foreign-born, as compared with 2.3 per cent for places with more than 10,000. Not more than 21.9 per cent of the total population of Mexico live in cities of more than 10,000 inhabitants, yet these cities contain 56.8 per cent of the total foreign-born.

TABLE 11

PERCENTAGE DISTRIBUTION OF POPULATION ACCORDING TO NATIVITY AND DEGREE OF URBAN INFLUENCE: A COMPARISON OF MEXICO AND THE UNITED STATES*

COUNTRY AND DEGREE OF URBAN INFLUENCE	TOTAL POPULATION	PERCENTAGE FOREIGN-BORN	PERCENTAGE NATIVE-BORN		
			Total	Born in State of Residence	Born in Other States
Total Mexico	100	0.9	99.1	88.5	10.6
Localities of over 10,000 inhabitants	100	2.3	97.7	67.0	30.7
Localities of 10,000 or less inhabitants	100	0.5	99.5	94.6	4.9
Total United States	100	8.8	91.2†	70.3	20.4
Urban	100	12.5	87.5†	63.8	23.2
Rural	100	4.0	96.0†	78.8	16.9
Nonfarm	100	5.1	94.9†	73.2	21.2
Farm	100	3.1	96.9†	83.7	13.0

* Data on Mexico from *Sexto censo de población* (1910); data on United States from the *Sixteenth Census of the United States* (1910).

† Includes other native-born.

2. The cities also contain a much higher proportion of persons who, though born in Mexico, were born outside the state in which they now reside. Thus, in cities having over 10,000 inhabitants, 30.7 per cent of the population were born in states of Mexico other than the one in which they reside, as compared with 4.9 per cent for localities with less than 10,000 inhabitants.

3. The proportion born in the same state in which they now reside is much greater in the rural districts than in cities, with 94.6 per cent for localities with less than 10,000 inhabitants and only 67.0 per cent for cities with more than 10,000.

4. The percentage of foreign-born in the United States is greater

even among the rural-farm population (3.1 per cent) than it is among the cities of over 10,000 in Mexico (2.3 per cent).¹⁴

Thus, from the standpoint of nativity, Mexico has a homogeneous population with very few "foreigners" within its borders; but the homogeneity as to nativity is more than counterbalanced by the diversity which exists within the country among the many small, local groups, resulting from geographical and cultural isolation. In other words, the population is so local in character that many of the numerous, separate, miniature societies do not have sufficient contact with one another to develop common national interests which transcend the horizons of the separate semiself-sufficient communities.

NATIONALITY GROUPS

The Mexican census defines nationality as synonymous with citizenship. The 1940 census reports that 99.7 per cent of the total inhabitants of Mexico are of Mexican nationality, that is, are Mexican citizens. This leaves but 67,548 individuals, or 0.3 per cent, who are classified as belonging to foreign nationality groups in that they are citizens of foreign countries. The census also shows that 37,802 individuals living in Mexico had previously been citizens of other countries but have now become citizens of Mexico. For our immediate purposes we shall add the above two groups together and consider them as constituting foreign nationalities. A foreign nationality is thus arbitrarily defined as including (*a*) all individuals living in Mexico who are citizens of a foreign country and (*b*) all individuals living in Mexico who at some time previously have been citizens of a foreign country but who have subsequently taken out Mexican citizenship papers. Thus defined, foreign nationalities include a total of 105,350 persons. Of these, the Spaniards constitute more than one-fourth, with 27.9 per cent (Table 12). The next largest group consists of persons from the United States, who make up 18.5 per cent. The Guatemalans are third, with 7.3 per cent, and the Chinese fourth, with 6.3. Slightly more than one-third (35.9 per cent) of the members of foreign nationality groups have become Mexican citizens, while nearly two-thirds (64.1 per cent) have retained their foreign citizenship. Persons from the United States and Guatemala now residing in Mexico have shown a greater tendency to become citizens of Mexico than have either Spaniards or Chinese. Of those from the United States, about half have become Mexican citizens, as compared with only 28.4 per cent of the Spaniards. Many of those from the United States who

14. The nativity of Mexico's population is given by states in Appen. A, Table 9.

have become citizens of Mexico are probably descendants of former Mexicans who had been living in the United States but who have now returned to Mexico. The comparatively small proportion of Spaniards who have become citizens is probably due to the large number who entered as refugees from Spain during the late 1930's and who either expected to return to Spain or had not been in Mexico

TABLE 12

POPULATION OF FOREIGN NATIONALITIES LIVING IN MEXICO*

NATIONALITY	TOTAL OF FOREIGN NATIONALITY		CITIZENS OF FOREIGN COUNTRIES		HAVE BECOME CITIZENS OF MEXICO	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Nationalities of the Americas						
United States.....	19,477	18.5	9,585	14.2	9,892	26.2
Guatemalan.....	7,715	7.3	3,358	5.0	4,357	11.5
Canadian.....	5,338	5.1	5,338	7.9	.....	.....
Cuban.....	1,861	1.8	1,123	1.7	738	2.0
Others of the Americas.....	2,850	2.7	1,626	2.4	1,224	3.2
Nationalities of Europe						
Spanish.....	20,344	27.9	21,022	31.1	8,322	22.0
German.....	4,279	4.1	2,852	4.2	1,427	3.8
British.....	3,747	3.6	2,987	4.4	760	2.0
Polish.....	2,886	2.7	1,552	2.3	1,334	3.5
French.....	2,589	2.5	1,801	2.7	788	2.1
Russian.....	2,287	2.2	1,037	1.5	1,250	3.3
Italian.....	1,853	1.8	1,183	1.8	670	1.8
Others of Europe....	3,973	3.8	2,362	3.5	1,611	4.3
Nationalities of Asia						
Chinese.....	6,661	6.3	4,856	7.2	1,805	4.8
Syrian and Lebanese	5,232	5.0	3,495	5.2	1,737	4.6
Japanese.....	2,181	2.1	1,550	2.3	631	1.7
All others.....	2,959	2.8	1,757	2.6	1,292	3.2
Unknown.....	118	0.1	64	0.1	54	0.1
Total.....	105,350†	100.0	67,548	100.0	37,292	100.0

* Data from *Sexto censo de población (1940)* (Dirección General de Estadística).

† This figure does not equal the total foreign-born, which is 177,275. It is assumed that the remaining 72,925 necessary to equal the total foreign-born are repatriated Mexicans born in the United States. There were 626,240 Mexicans repatriated from 1927 to 1932.

long enough to have become citizens at the time that the census was taken. It is generally conceded that throughout the years the Spaniards have shown greater tendency to become citizens than has any other foreign group.

From 1927 to 1944 the greatest proportion of immigration and emigration took place between Mexico and the United States. The

Mexican emigrants left to work in the United States. This was particularly true during the years prior to 1930. The Mexican immigrants were persons who had lived in the United States for a while but who had decided to return to their native country. Most of these immigrants returned during the period 1929-32 when the economic depression began to make employment opportunities scarce in the United States.

TABLE 13

NUMBER OF IMMIGRANTS ENTERING MEXICO AND NUMBER OF EMIGRANTS LEAVING MEXICO, 1927-44, ACCORDING TO NATIONALITY*

NATIONALITY	IMMIGRANTS		EMIGRANTS		EXCESS OF IMMIGRANTS OVER EMIGRANTS†
	No.	Per Cent	No.	Per Cent	
Nationalities of the Americas					
Mexican.....	646,460	85.4	252,065	71.4	394,395
United States.....	44,902	5.9	43,260	12.3	1,642
Guatemalan.....	1,669	0.2	1,627	0.5	42
Cuban.....	1,642	0.2	3,257	0.9	- 1,615
Canadian.....	640	0.1	835	0.2	- 195
Others of the Americas....	2,489	0.3	5,980	1.7	- 3,491
Nationalities of Europe					
Spanish.....	27,484	3.6	15,493	4.4	11,991
German.....	4,986	0.7	5,740	1.6	- 754
British.....	3,996	0.5	5,081	1.4	- 1,085
French.....	2,634	0.3	2,982	0.8	- 348
Italian.....	1,574	0.2	1,772	0.5	- 198
Others of Europe.....	11,894	1.6	6,605	1.9	5,289
Nationalities of Asia					
Japanese.....	2,867	0.4	1,185	0.3	1,682
Chinese.....	1,860	0.2	4,616	1.3	- 2,756
Syrian and Lebanese.....	1,574	0.	1,999	0.6	- 425
Others of Asia.....	232	.....	234	0.1	- 2
All others.....	114	.....	128	.....	- 14
Unknown.....	228	.....	24	.....	204
Total.....	757,245	100.0	352,883	100.0	404,362

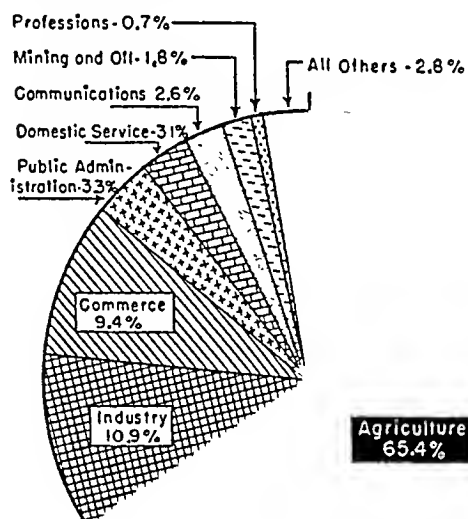
* Data from Dirección General de Estadística.

† Excess of emigrants is indicated by a minus sign.

Among the foreign nationality groups coming to Mexico during this same period, 1927-44, the largest number came from the United States, with 44,902 persons. The Spaniards were second, with 27,484 immigrants; but, since emigration was also proportionately greater among persons coming from the United States, the net immigration was higher among the Spaniards—11,991 persons as compared with only 1,642 from the United States. The Japanese net immigration amounted to 1,682 persons. This is slightly larger than the net immi-

gration from the United States and second only to that of the Spaniards (Table 13). There was a net emigration of 2,756 Chinese. Most of the other groups registered a net emigration.

The foreign nationality groups are concentrated mostly in the cities. Although only 21.9 per cent of Mexico's total population reside in cities of more than 10,000 inhabitants, the proportion of those persons having foreign citizenship who live in cities of this size reaches 68.6 per cent (Appen. A, Table 10). In the cities are found 86.6 per cent of the Spaniards and 73.3 per cent of persons from the United States.



PROPORTION OF
MEXICO'S GAINFULLY
EMPLOYED POPULA-
TION FOUND IN ITS
VARIOUS OCCUPA-
TIONAL GROUPS
INDICATED

FIG. 14.—Percentage of Mexico's gainfully employed found in the various occupational groups indicated. Based on Table 14.

The nationalities showing the highest proportions in localities with less than 10,000 inhabitants are the Canadians and the Guatemalans. The Canadians are mainly Mennonites, who emigrated from Canada in the middle 1920's and settled in agricultural colonies in the northern states of Chihuahua and Durango. The Guatemalans, who also are engaged in agriculture, are found mostly in southeastern Mexico in those states which border on the Republic of Guatemala.

OCCUPATIONAL GROUPS

It was noted in chapter ii that 65.4 per cent of the gainfully employed in Mexico are engaged in some form of agriculture. In Table 14 and Figure 14 the economically active (gainfully employed) persons in Mexico are all classified according to the type of employment in

which they are primarily engaged. Only 10.9 per cent are engaged in industry and 9.4 per cent in commerce; public administration accounts for 3.3 per cent, only slightly more than domestic service with 3.1 per cent. As might be expected, striking differences are found among the occupations of each sex. Among the females, more than one-third (35.2 per cent) are engaged in domestic service in comparison with only 0.5 per cent among the males. Likewise, 22.4 per cent of the females are employed in commerce as compared with 8.4 per cent of the males. On the other hand, 69.9 per cent of the males

TABLE 14
TOTAL ECONOMICALLY ACTIVE PERSONS OF MEXICO CLASSIFIED
ACCORDING TO TYPE OF EMPLOYMENT, BY SEX*

TYPE OF EMPLOYMENT	ALL WORKERS		MALES		FEMALES	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Agriculture, livestock, forestry, hunting, and fishing .	3,830,892	65.4	3,791,028	69.9	39,864	9.2
Industry	639,605	10.9	567,571	10.5	72,034	16.7
Commerce	552,457	9.4	455,760	8.4	96,697	22.4
Public administration	191,587	3.3	149,360	2.8	42,227	9.8
Domestic service	180,479	3.1	28,049	0.5	152,430	35.2
Communication and transportation	149,469	2.6	146,558	2.7	2,911	0.7
Mining, oil, and natural gas	106,706	1.8	105,397	1.9	1,309	0.3
Professions and liberal occupations	42,747	0.7	38,736	0.7	4,011	0.9
Other employments	164,203	2.8	143,229	2.6	20,974	4.8
Total	5,858,145	100.0	5,425,688	100.0	432,457	100.0

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

are employed in agriculture as compared with 9.2 per cent of the females.

The proportion of persons employed in domestic service reflects the striking contrast which is found between Mexico City and the rest of the country. In Mexico City there are 75,258 employed domestic servants (male and female) who constitute one-seventh (14.7 per cent) of the total economically active population of the city, as compared with 3.1 per cent for the country as a whole. This is in contrast to a city like New York, where only 4.8 per cent of the gainfully employed are in domestic service.¹⁵

The foregoing data do not present an adequate picture of the vari-

15. In the United States, 4.7 per cent of the gainfully employed are in domestic service, as compared with 3.1 per cent in Mexico.

ous occupational activities in Mexico, since they refer only to what are supposedly the principal occupations. Many rural people supplement their agricultural activities by handicrafts in the home. No adequate study of Mexican handicrafts has, as yet, been made. Experience seems to suggest, however, that much of the farming is of the part-time variety and is combined with rural crafts. This will become apparent later in this report.

SEX COMPOSITION

The sex composition of a population is usually expressed in terms of the sex ratio. This is determined by computing the number of males in a given population group per 100 females in the same group. Where the sexes are evenly distributed the ratio will be 100, which is interpreted to mean that there are 100 males for every 100 females. If males predominate, the ratio will exceed 100, while if females predominate it will be less than 100. The sex ratio in the United States in 1940 was 100.7, indicating that the sexes were about equally distributed except for a very slight predominance of males. In Mexico, for the same year, the sex ratio was only 97.4, indicating that females tended to predominate in the total population. Since nature has arranged that a comparatively equal proportion of males and females will be born (actually slightly more males), we must seek an explanation of sex differences either in a selective death rate or in selective migration. It would appear that both these factors may have been operating in this case. Mexico has a long history of wars and revolutions, and, since men do most of the fighting, their numbers are depleted in such times. Even though conditions are comparatively peaceful at present, Mexican vital statistics continue to report thousands of violent and accidental deaths each year, many of which are homicides (see Table 70, p. 338). These result in large degree from conflicts over property rights, political rivalries, and jealousies of one kind or another. The overwhelming proportion of such victims are males, and this would tend to increase the male death rate.

Many sociological studies have demonstrated that males tend to predominate in long-distance migrations between countries.¹⁶ The principal currents of migration of Mexicans to the United States, other than to escape revolutions, have been for the purpose of seeking employment. In such migrations males tend to predominate. Many of them eventually return to Mexico, but some undoubtedly

16. P. A. Sorokin and C. C. Zimmerman, *Rural-urban Sociology* (New York, 1929), chap. xxiv.

remain in the United States. This would tend to lower the sex ratio in the areas from which they migrate.

There is usually a difference in the sex ratios of cities as compared with rural districts, the latter having a higher proportion of males. In the United States in 1940 the ratio for urban areas was only 95.5 while that for rural areas was 107.8 (Table 15). In Mexico the sex ratio for the cities with more than 10,000 inhabitants is only 86.0 and is 100.8 for the rest of the population. The reason for the greater proportion of females in the cities is due to the greater occupational opportunities for women in the cities and to differential migration. In

TABLE 15
NUMBER OF MALES PER 100 FEMALES, BY DEGREE OF URBAN INFLUENCE
A COMPARISON OF MEXICO AND THE UNITED STATES*

Country and Degree of Urban Influence	No. of Males	No. of Females	No. of Males per 100 Females
Total Mexico.	9,695,787	9,957,765	97.4
Localities of over 10,000 inhabitants.	1,992,016	2,316,224	86.0
Localities of 10,000 or less inhabitants	7,703,771	7,641,541	100.8
Total United States.	66,061,592	65,607,688	100.7
Urban...	36,363,706	38,059,996	95.5
Rural.....	29,697,886	27,547,687	107.8
Nonfarm	13,757,516	13,271,869	103.7
Farm..	15,940,370	14,275,818	111.7

* Data on Mexico from *Sexto censo de población* (1940); data on United States from the *Sixteenth Census of the United States* (1940).

the rural districts and on the farms there is little place for an adult woman outside the role of housewife and mother or of worker on the farm. If she fails to marry, she may be dependent on her father or brothers for support since they usually assume the responsibilities of the farm; but, if she has ambition to become independent and self-supporting, she is likely to become attracted toward the city, where there are more opportunities, such as domestic service, factory labor, and clerical work. In Mexico City alone, for example, according to the census of 1940, there were 66,793 women employed in domestic service, and these constituted 13 per cent of the total gainfully employed population of Mexico City. This proportionately greater migration of females to the cities leaves a higher proportion of males in the rural districts and, at the same time, makes for a relatively smaller proportion in the cities.

AGE COMPOSITION

Demographically speaking, Mexico is what might be called a "young" country in comparison with the United States. This is because a relatively large proportion of the total inhabitants consists of young children and a smaller proportion consists of elderly persons. The birth rate is high, and the possibilities for rapid increase in population are immense if only the death rates can be reduced somewhat. In the United States, on the other hand, the birth rate has been declining steadily for some time,¹⁷ with the result that the relative proportion of young children to the total population is low, while the proportion of aged persons is relatively high. In Mexico, 29.0 per cent

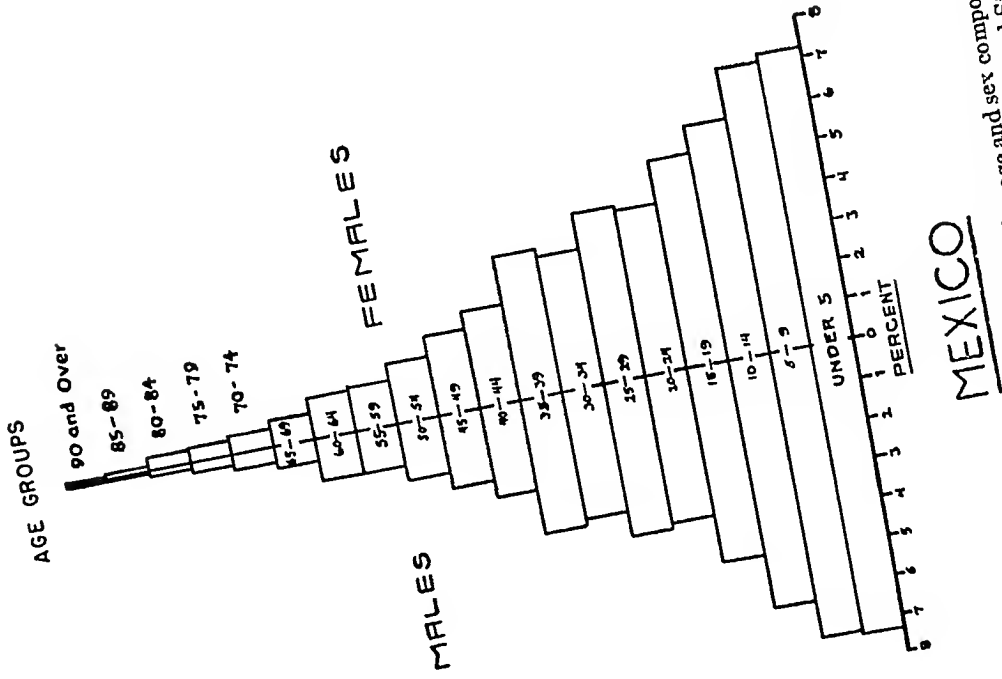
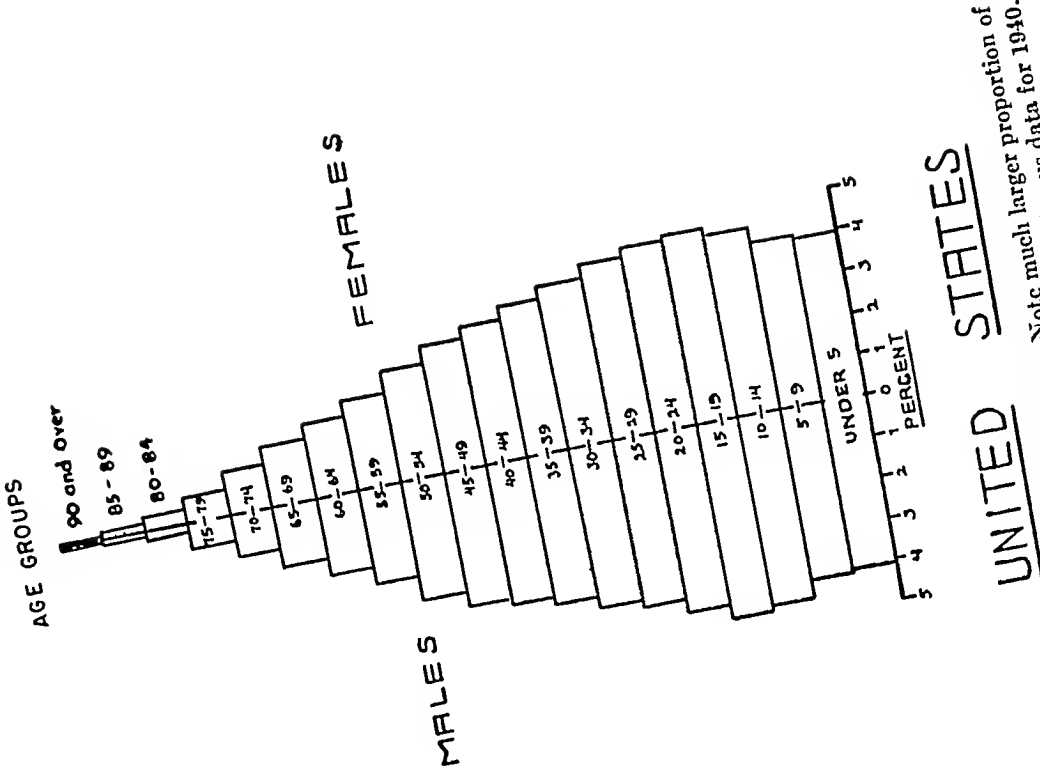
TABLE 16
PERCENTAGE OF TOTAL POPULATION IN THE VARIOUS
AGE GROUPS INDICATED: A COMPARISON OF
MEXICO AND THE UNITED STATES*

Age Group	Mexico	United States
Under 10	29 0	16 1
10-19 ..	22 4	18 3
20-44 .	34 4	38 0
45-64 ..	11 2	19 8
65 and over	3 0	6 8
Total	100 0	100 0

* Data for Mexico from *Sexto censo de población* (1940); data for the United States from the *Sixteenth Census of the United States* (1940).

of the total population consists of children under ten years of age in comparison with 16.1 per cent for the United States; and in Mexico, 22.4 per cent are in the ten- to nineteen-age group as compared with 18.3 per cent for the United States. Roughly half of Mexico's population (51.4 per cent) is under twenty years of age, as compared with about one-third (34.4 per cent) for the United States. For the age groups above twenty years, the higher proportions are found in the United States. Slightly more than one out of every four persons in the United States (26.6 per cent) is over forty-four years of age, as compared with one out of seven (14.2 per cent) in Mexico. A standardized method of illustrating graphically the differences in age and sex composition is a diagram known as the "population pyramid." Figure 15 represents such a diagram for the populations of Mexico and the

17. A slight reversal of the trend has been noted during the past few years as a result of conditions growing out of World War II.



UNITED STATES

Fig. 15.—Population pyramids, showing age and sex composition of population in Mexico and the United States. Based on Appendix A, Table 11, and on the United States Census data for 1940.

MEXICO

United States.¹⁸ The age groups are indicated down the center of the diagram; the proportion of each age group consisting of males is shown by means of horizontal bars on the left-hand side and the proportion of females on the right-hand side. When the diagram resembles a true pyramid, as does that for Mexico, with the longest bar on the bottom representing the youngest age group and each succeeding bar shorter, the population may be designated as a "young" one with large potentialities for growth. This is because more children are born during each period than are needed to replace those in the succeeding age group. But if the diagram tends to take on aspects of a spindle, as does the diagram for the United States, with the proportion of the population in the lower age groups becoming progressively smaller, the population may be classified demographically as an "old" one which is beginning to show signs of dying out. In such a society there are not enough children born to replace the succeeding age group. From a comparison of these two diagrams we may conclude that the population of Mexico may definitely be classified as "young," while that of the United States has reached "adulthood" and is approaching "old age."¹⁹

Definite differences in age composition of the population are usually found between cities and rural districts within a given country. Data indicating such differences in Mexico and in the United States are given in Table 17. Children under ten years of age constitute 30.4 per cent of all inhabitants of Mexico living in localities which do not exceed 10,000 in population; the percentage is only 23.8 in cities having more than 10,000 inhabitants. The age group ten to nineteen is almost equally distributed between the two types of localities but shows a slightly higher proportion in the smaller communities. The succeeding age groups over nineteen years all show a larger proportion in the cities with more than 10,000 inhabitants. The same types of rural-urban differences are indicated from the data for the United States. It should be noted, however, that differences in the proportion of young children in the populations of the two countries are so great that in Mexico even the cities with more than 10,000 inhabitants have a higher proportion of children under ten years of age (23.8 per cent) than do the farm areas in the United States (20.4 per cent).

18. Data for Mexico are based on Appen. A, Table 11. Data for the United States are based on data from the United States census of 1940. For comparable data on the rural-urban distribution of age groups, see also Appen. A, Tables 12 and 13.

19. The age composition of the population in most other countries of Latin America is probably quite similar to that described for Mexico.

Another method of illustrating differences in the age composition of populations is to relate the number of children under fifteen to the number of adults which must carry the burden of their support. This comparison is made for both Mexico and the United States by size of community in Table 18. Mexico has 902.6 children under fifteen

TABLE 17

PERCENTAGE OF THE TOTAL POPULATION IN THE VARIOUS AGE GROUPS INDICATED, BY DEGREE OF URBAN INFLUENCE: A COMPARISON OF MEXICO AND THE UNITED STATES*

AGE GROUP	PERCENTAGE OF TOTAL POPULATION							
	Mexico			United States				
	Total	Localities of over 10,000	Localities of 10,000 or Less	Total	Urban	Rural		
						Total	Nonfarm	Farm
Under 10.....	20.0	23.8	30.4	16.1	13.5	10.5	18.4	20.4
10 - 19.....	22.4	21.9	22.5	18.3	16.5	20.5	18.5	22.3
20 - 44.....	34.4	38.7	33.2	38.0	42.0	35.1	38.1	32.4
45 - 64.....	11.2	12.4	10.0	19.8	21.1	18.1	17.8	18.3
65 and over...	3.0	3.1	2.0	6.8	6.8	6.9	7.3	6.6
Total....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Data for Mexico from *Sexto censo de población* (1940); data for the United States from the *Sixteenth Census of the United States* (1940).

TABLE 18

NUMBER OF CHILDREN UNDER 15 YEARS OF AGE PER 1,000 ADULTS 20 TO 64 YEARS OF AGE, BY DEGREE OF URBAN INFLUENCE: A COMPARISON OF MEXICO AND THE UNITED STATES*

Country and Degree of Urban Influence	No. of Children under 15 Years of Age	No. of Adults 20 to 64 Years of Age	No. of Children per 1,000 Adults
Total Mexico.....	8,096,145	8,970,074	902.6
Localities of over 10,000....	1,511,824	2,201,908	686.6
Localities of 10,000 or less..	6,584,321	6,768,166	972.8
Total United States...	32,972,081	77,344,357	426.3
Urban.....	15,945,147	46,911,990	339.9
Rural.....	17,026,934	30,432,367	559.5
Nonfarm.....	7,473,205	15,106,410	494.7
Farm.....	9,553,729	15,325,957	623.4

* Data for Mexico compiled from *Sexto censo de población* (1940); data for the United States compiled from the *Sixteenth Census of the United States* (1940)

per thousand adults twenty to sixty-four years of age. This is more than twice as many as the United States has with only 426.3. This means that, on the average, adult persons in Mexico must care for and support more than twice as many young children as do adults in the United States.

The greater relative proportion of children in the country districts and of adults in the cities is an old phenomenon and is to be explained in terms of the higher birth rate in the country and of the migration cityward of young adults from the rural districts. Farming as an occupation is much more conducive to family life than are many of the city occupations. Children may be a definite asset on the farm, where there is work for all to do and where various tasks are available to fit the capabilities of children of different ages. In the city, however, where often there is but one breadwinner in a family, where house rent must be paid, and where all food must be purchased, children often prove to be a definite economic liability. This may induce many persons in the city to forego marriage entirely, to marry at a later age, or to restrict the number of children after they do marry. But the city offers a wide variety of occupational opportunities for those who wish to get ahead, and young adults are continually leaving rural districts to take up employment in the cities. This cityward migration tends to swell the adult age groups in the cities and to diminish proportionately those of the country districts. Such a process naturally leaves the rural districts with proportionally fewer adults and with the responsibility of more children for these fewer adults to educate and support.

Unfortunately, modern social institutions, such as schools, health services, and recreational facilities, are much more scarce and inadequately developed in the rural, than in the urban, areas even though the need for them would appear to be greater, since it is in the rural districts that the majority of the future citizens of the nation are being reared.

In view of these circumstances it would seem that Mexico has acted wisely in focusing much of her revolutionary program in the rural districts. It is from these areas that the majority of her future human resources will come.

PART II

The Relation of the People to the Land

The Landholding Village (Prior to 1910)

MUCH of Mexico's agrarian history revolves around the struggle for supremacy between the landholding village and the large, privately owned, semifeudal, landed estate, commonly referred to as the "hacienda." For nearly four hundred years, with but minor reverses, the hacienda gradually gained the ascendancy and slowly but steadily devoured the village lands and even the villagers themselves.¹ This process continued until 1910, at which time the landholding village had almost disappeared, its lands having been incorporated into the hacienda and its inhabitants essentially converted into serfs. Since that date, however, the tables have been reversed, and the pendulum has been swinging back toward the landholding village, slowly at first but rapidly since 1930—so rapidly that at the present time nearly half the crop land in Mexico is held by a modified form of the landholding village (ejido),² while the hacienda has been fighting vigorously for survival. In the meantime, impetus has been given to the development of the small private holding, which had little opportunity to develop prior to the Revolution.

1. The purpose of this and the succeeding chapter is to acquaint the reader with the agrarian background which gave rise to the Revolution of 1910. These two chapters are then followed by another, summarizing the agrarian aspects of the Revolution. The author is of the opinion that this background material is basic to the understanding of the present rural problems. These three chapters are drawn almost entirely from secondary sources, and acknowledgment is hereby gratefully made to the following works: Helen Phipps, *Some Aspects of the Agrarian Question in Mexico—A Historical Study* (Austin, Tex., 1925); Eyer N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, 1937); G. M. McBride, *The Land Systems of Mexico* (New York, 1923); Lucio Mendieta y Núñez, *El Problema agrario de México* (Mexico City, 1934); Frank Tannenbaum, *The Mexican Agrarian Revolution* (New York, 1929); Manuel Fábila (ed.), *Cinco Siglos de legislación agraria en México (1493-1940)*, Vol. I (Mexico City, 1941); Luis Cabrera, "Proyecto de ley agraria," (1912), in Fábila (ed.), *op. cit.*; Andrés Molina Enríquez, *Los grandes problemas nacionales* (Mexico City, 1909); Wistano Luis Orozco, *Legislación y jurisprudencia sobre terrenos baldíos* (2 vols.; Mexico City, 1895).

2. See chaps. ix and xi.

The social and economic transformation that is taking place in Mexico today grows out of the previously existing land-tenure patterns, and to be understood, it must be related to what existed before. Therefore, before proceeding to a discussion of recent agrarian reforms, it seems advisable to devote a chapter to each of the two most important prerevolutionary systems of land tenure. The present chapter deals with the landholding village, the succeeding chapter with the hacienda. This background material will be of aid in reaching an understanding of the agrarian problems of the present time.

THE LANDHOLDING VILLAGE IN PRE-CONQUEST MEXICO

When the conquistadors landed in Mexico, they found the area inhabited by some six hundred Indian tribes representing different stages of social and cultural development. In the semiarid plains of the north and in the mountains of the Sierra Madre were found nomadic groups, living mostly by hunting and fishing, with no conception of land as property. The small patches of land which they occasionally used for planting corn were abandoned whenever the harvest was gathered. The members of the tribe shared more or less equally in what was dimly understood to be the tribal domain. But on the central plateau, where most of the Indians were located, and on the peninsula of Yucatán, agriculture was developed as the fundamental basis of the economy. Tillable land played such an important role in the scheme of living in these areas that definite rules of land tenure had been worked out and rights of possession clearly established; the result was the landholding village. This village pattern of land tenure has exerted an influence on land-tenure patterns throughout Mexico's history, and certain of its features have been incorporated into the agrarian code, which is now used as the basis for Mexico's land-redistribution program. In view of this fact, it seems advisable to examine in some detail the essential characteristics of the landholding village among the aborigines.

Before the coming of the Spaniards, the Indian population of the central plateau was organized into tribes. Each tribe was made up of a number of kinship groups or clans known as *calpulli*. The clan consisted of a number of households settled closely together. Among the smaller units of settlement a single clan constituted a village, but the larger villages included several distinct clans. The practices with reference to land tenure may be described briefly.

1. There was an area of land surrounding each village that was known as the "town land" (*altepetlalli*). This town or village land in-

rows of maguey, irrigation ditches, or paths. The members of the clan vigorously defended their lands from intrusion by others and inflicted severe penalties, sometimes even the death penalty, for the removal of landmarks.⁶ The untilled area of the *calpulalli* ordinarily could be used by any member of the clan for the purposes of hunting, fishing, cutting wood, or gathering grass for roofing or for other household uses. It could not be used by a member of any other clan of the village.

In addition to the plots of land assigned to members of the *calpulli*, there were lands set aside for special public purposes. It was the gradual extension of the area and the functions of these public lands that was tending to undermine the democratic control and uses of the common holdings at the time of the Conquest. This appears to have come about in the following manner:

1. In the more primitive group the *pariente mayor* was allotted a parcel of land in the same manner as any other member of the clan, but it was cultivated for him by the rest of the kinship group in order to free his time for public service. In the larger towns and the more thickly settled areas, the *pariente mayor* gradually came to be considered as different from other members, and his plot of land was increased in size relative to the other plots. It also came to be designated by another name—*pilalli*. Also, in the larger settlements a council house (*tecpan*) came into existence and was used as an official residence for the *pariente mayor* and his family, as well as a meeting place for members of the clan and visiting guests. In some cases it became the custom that, when the *pariente mayor* died, his family should continue living at the council house and should be supported by the special lands set aside for this purpose (*tecpan-tlalli*). These lands were tilled by serfs called *mayerques*.⁷ Thus in the larger settlements the descendants of the *pariente mayor* were gradually being set apart from the rest of the group as a distinct class, enjoying special privileges.

2. Lands were also set aside for the maintenance of the warriors. These lands were originally cultivated in common, according to

6. Phipps, *op. cit.*, p. 15.

7. "Both serfdom and slavery existed in pre-colonial Mexico. Among the Aztecs there were seven crimes punishable with slavery; some poor or indolent persons voluntarily sold themselves into slavery, especially in times of food scarcity; and sometimes prisoners of war were thus saved by their captors from the sacrificial stone. When the Aztecs besieged a town, if it had to be taken by force, the whole population was reduced to slavery" (Phipps, *op. cit.*, p. 16, n. 22).

assignment of the *pariente mayor*, but later came to be tilled by serfs. As a reward for unusual valor, warriors were sometimes awarded individual plots of land, with serfs to till them. Gradually these lands became more or less hereditary, in that the sons of the recipients were given special preference in reassignment.

3. There were special public lands assigned for the use of the priesthood (*teocalli*). These were of the best type and for a time were tilled in common by members of the clan; but, as these lands increased in area in order to support a large class of priests, a special group of serfs was assigned to them.

Thus were developing classes of priests and nobles, which enjoyed special privileges. The number of nobles at the time of the Conquest was estimated at 120,000. In some instances chiefs or nobles were granted overlordships of entire pueblos and were granted jurisdiction over land and people, including the right to receive tribute, labor, and other personal services from the inhabitants. These estates might be divided and passed on to the children. They could be alienated under certain conditions, but it was definitely stipulated that they could not be transferred to *maceguales* ("holders of communal lands"). The use of public lands was thus gradually extended to the service of special individuals and groups until there developed landed estates with serfs literally "bound to the soil." These serfs could not leave or be moved. If the land was transferred to some other use, they went with it. They tilled the soil and gave a share of the crops to the landlord. In addition, they rendered certain personal services, such as providing firewood, water, and personal assistance at special times. The resemblance of these estates to the more modern hacienda will be readily recognized.

Briefly summarizing, then, we may emphasize the two following points:

1. The landholding village was the dominant unit in the agrarian economy at the time of the Conquest. Certain fundamental aspects of this village have survived throughout Mexico's history and are still in existence in isolated areas. From this village many of the specifications for the modern ejido have been derived, as we shall see later.

2. Although the landholding village was dominant, certain developments had taken place which were giving rise to the large, individual landed estate, which was tilled by serfs bound to the soil. Thus the seeds for both the hacienda and the modern ejido had germinated among the aborigines before the Spaniards arrived.⁸

8. Simpson, *op. cit.*, pp. 4-6.

THE LANDHOLDING VILLAGE DURING THE COLONIAL PERIOD

The Spanish conquerors were familiar with both the landholding village and the individual landed estate. They had seen these two types of land tenure existing side by side in Spain, and measures were taken which were designed to foster and protect both types in the New World. That the collective holding was widely distributed in the homeland is indicated by McBride:

The towns of Castile had been, from very ancient times, landholding bodies, possessing more or less extensive territories. Thus, every town had what were known as *propios*, lands owned by the village itself and administered by the town officers. These *propios* were rented year by year, and from the income thus obtained the expenses of local government were met as well as the taxes levied on the community by higher authorities. In addition to these cultivated lands each town possessed an area just outside the city gates that was styled the *ejido* (from Latin *exitus*). This ground was used for a great variety of purposes. It contained the pound for stray cattle as well as the public threshing floors and places where the villagers might winnow their grain in the open air. It contained the public rubbish heap and the village slaughter pen. Upon it the farmer might unload the crops brought in from the fields or might keep his hives of bees. Parts otherwise unoccupied served for playgrounds and loafing places. No building might be constructed upon this land, nor might it be cultivated. The custom of maintaining the *ejido* for the common use of the inhabitants had been recognized, if not established, by the law of the Siete Partidas (1256-1265).⁹

These Castilian villages also possessed common pasture lands for their flocks and herds and woodlands upon which the town people depended for their fuel supply as well as for their timber for building purposes. From the foregoing, it is clear that the Indian landholding village was not entirely strange to the conquerors, even though it differed in some details from the pattern which was familiar to them.

The Spanish Crown not only established measures for the protection of the landholding villages in New Spain but also issued regulations for the founding of new settlements to be patterned after the Castilian variety. Legislation was enacted to the effect that each Indian pueblo, old or new, should be assured of sufficient lands for its adequate support. The minimum requirements for this purpose were specified as including a *fundo legal* ("town site"), measuring 600 *varas* from the church door in every direction. Beyond the town site there was to be an *ejido*, varying in size according to need but always encompassing an area of at least one square league.¹⁰ This *ejido* was to include the agricultural land of the village, the woodland, and the

9. *Op. cit.*, p. 106. Reprinted by permission of the American Geographical Society.

10. *Ibid.*, p. 124.

pasture land. These lands all were to be inalienable and administered by a town council. It should be noted that the ejido as here specified had undergone a change in definition from the ejido of Castile. It had been transformed from a small, relatively unimportant area at the exit of the village to one which included all the land of the town. It appears that the Spaniards had gradually come to apply the term "ejido" to the *altepetlalli* ("town land") of pre-Conquest days. They paid no attention, however, to the kinship group (*calpulli*), which among the aborigines had served as the fundamental unit, within the village, for distributing the *altepetlalli*. The kinship group gradually lost significance, and the right to share in the use of the village land was determined on the basis of mere residence in the village. Despite certain modifications, the landholding village was carried over into the colonial period as a fundamental form of land tenure. So numerous were the provisions designed for the protection of the properties and personal rights of the Indians that the laws of the Indies have been referred to as a veritable "Code of Privileges" for the aborigines.¹¹

INFLUENCE OF THE "ENCOMIENDA" SYSTEM

In spite of the many regulations designed to protect and encourage the landholding village, other measures had been adopted which from the very beginning were tending to strangle it. The most far reaching and effective of these measures was the *encomienda* system. The *encomienda* was a device for accomplishing the threefold purpose of (1) Christianizing the Indians, (2) bringing them into subjection to the Crown, and (3) rewarding the conquistadors for their exploits. It consisted of an allotment in trust of one or more villages to a given individual, and it carried with it the right to collect tribute from the inhabitants and to exact certain personal services from them, such as labor in the fields and in the household. The individual receiving such a grant was referred to as an *encomendero* and was obligated to Christianize the Indians falling under his jurisdiction and to protect their persons and property. At first, the *encomienda* was regarded as a temporary arrangement, subject to the pleasure of the king; but pressure from the recipients of such grants resulted in a series of decrees extending them from one generation to another for at least five generations. In spite of royal orders to the contrary, the system gradually developed into a feudalistic pattern of land tenure,

11. Phipps, *op. cit.*, p. 24. Also see Genaro V. Vásquez, *Doctrinas y realidades en la legislación para los pueblos indios* (Mexico City, 1940).

wherein the *encomendero* came to regard the district assigned to him as his personal property and the Indians inhabiting it as his serfs.

The transition to this interpretation was facilitated by a series of measures which tended to confirm possession of lands acquired through the *composición*.¹² This was a scheme for the measurement and delineation of landholdings in order to correct any flaws in the title and to discover public lands that were being held illegally. This seemed necessary and important because many land grants had been made in an indefinite manner and titles were in a state of confusion. It was specially stated that the rights of the Indians should be protected; that property acquired from them illegally should not be confirmed; and that landholding villages should have the right of *composición*. But the Indians did not realize the necessity for having their property confirmed by the *composición*, nor did they understand the procedure for doing so. On the other hand, the landowners took advantage of the measure and used it as an opportunity to confirm possession of lands occupied illegally. Although at the beginning a few properties were measured carefully, the task of doing this proved to be expensive and time-consuming because of the great extent of the properties and the vagueness of the boundary descriptions. Since very little public land was found among the first properties measured, it was decided that, by the mere payment of a fee, landholders could arrange to have their properties certified. This practice resulted in a great deal of land-grabbing at the expense of the villages. The Indians were in a particularly disadvantageous position in this regard, since, according to Spanish law, all the land in Mexico was the property of the Crown unless title of ownership had been granted by royal decree. Most of the Indians knew nothing about the laws, and few villages had received royal grants. It was thus comparatively easy for the landowners to incorporate the village lands into their estates and to argue that in doing so they were merely making temporary use of land that belonged to the Crown. After maintaining possession for a period of time, they were often able to obtain confirmation of their usurpations by means of the *composición*.¹³

In 1735 another attempt was made to define the legal limits of private estates and to identify lands belonging to the royal domain. A

12. McBride, *op. cit.*, pp. 56-59.

13. Henry Bamford Parkes, *A History of Mexico* (Boston, 1938), p. 98.

decree was issued giving anyone having knowledge of royal lands occupied illegally the right to denounce and file claim on them. By paying a moderate fee one might acquire title to such lands for himself. This measure naturally was favorable to the shrewd and the alert and resulted in a great deal of "denouncing" of village lands. A very good example of how this denunciation tended to operate against the landholding village was reported in a publication dated about 1860 and related by Helen Phipps. She states that the authenticity of this case was supported by twenty-three documents. Her account is as follows:

ting forth that they were a village of 4,000 people without land, that they had to carry water six miles and could not build an aqueduct because their labor all belonged to the "tyrants."¹⁴

The above case illustrates the illegal means used by landholders in acquiring village property and the tenacity with which the Indians tried to hold onto their lands. Incidentally, it is said that such tenacity proved to be an important source of income for lawyers during this period, many of whom specialized in cases involving Indians.¹⁵ Such cases proved lucrative because often they were dragged out from one generation to another. Frequently they were terminated only when the Indians became so poverty-stricken that they could no longer pay any lawyer's fees. Landholders, on the other hand, allowed for legal expense as a regular part of their budgets.¹⁶

Undoubtedly, some of the village lands were alienated during this period by means of direct purchase. We have mentioned the fact that *encomenderos* had the right to collect tribute and to exact services from the Indians intrusted to them as a part of the *encomienda*. Indians of the free villages, not falling under the *encomienda* system, were required to pay tribute directly to the Crown. This royal tribute, especially in years when harvests were poor, left the villagers almost constantly in need of money. Landowners took advantage of these needs by bargaining with the Indians for their lands. Although royal decrees had been issued to the effect that the Indians must not be cheated, these laws were easily circumvented, and some of the more valuable village lands were secured for a fraction of their value.

As a result of reports which reached Spain from time to time concerning the adverse effect that the *encomienda* system was having on the personal liberties and property rights of the Indians, a series of measures was dictated, with the object of restricting the control and influence of the *encomenderos*. These measures finally culminated in an edict, in 1720, abolishing the *encomienda* system entirely except for the one large grant in perpetuity to Cortés and his heirs; but the abolition came too late to be effective. By this time the *encomenderos* had such firm control on the lives and property of the Indians that the latter were virtually serfs. As indicated previously, most of the *encomenderos* had taken advantage of opportunities to acquire some degree of legal sanction to their intrusted holdings through the *composición* so that they no longer considered the *en-*

14. *Op. cit.*, pp. 33, 34.

15. *Ibid.*, p. 35.

16. *Ibid.*

comienda as the legal source of authority for their landholdings.¹⁷ Furthermore, a system of small advanced payments to the Indians had developed which virtually bound them to the land through indebtedness that they were never able to liquidate.

INFLUENCE OF THE REFORM LAWS

There were many free landholding villages that did not fall under the *encomienda* system, and these constituted an important aspect of the agrarian system of Mexico until after the middle of the nineteenth century.

One of the most serious and far-reaching blows to the landholding village resulted from one of the reform laws known as the *Ley de desamortización* ("Law of Expropriation") of June 25, 1856, commonly referred to as the "Ley Lerdo" from the name of its author, Miguel Lerdo de Tejada, Minister of the Treasury under Comonfort. The law was later incorporated into the Constitution of 1857. The avowed purposes of the legislation were (1) to stimulate the economic development of the Indian element by offering the incentive of individual proprietorship and (2) to counterbalance the power of large landholders by creating a middle class composed of small farmers.¹⁸ Both these motives appeared to be worthy, and it was sincerely believed that these developments were essential to the creation of a real democracy in Mexico to replace the previously existing oligarchy. The law stipulated that no civil or ecclesiastical corporation could acquire or administer any property other than the buildings devoted exclusively to the purpose for which that body existed. It provided that properties then owned by such corporations must be sold to the tenants or usufructuaries occupying them and that properties not rented or leased would be sold at public auction.¹⁹ The landholding village was said to be a civic body, and the law was interpreted as meaning that all communal property was to be granted in severalty to the Indians holding the respective plots.

The framers of the constitution did not foresee the disastrous results that these measures would bring to the villages. In the north and northwest, where the mestizo element was dominant and where the villagers were well acquainted with the institution of private property, the measure seemed to produce the desired effect, and villagers used it as means of confirming possessions which they had

17. McBride, *op. cit.*, p. 61.

18. *Ibid.*, p. 133.

19. Phipps, *op. cit.*, p. 77.

long regarded as their own. In the Central Mesa and in the south, however, where the Indian element was dominant and where collective property was the only kind understood or appreciated, the measure proved to have the opposite effect. In these areas the Indians opposed and evaded the law. If they were forced to comply, some of them accepted title and then immediately transferred this to some trusted elder of the community. Many others became the prey of unscrupulous speculators and lost their lands almost as soon as the deeds had been issued. Frequently, the titles to the land never reached the Indians at all but were held by dishonest government officials or fell into the hands of large landowners, who kept them for a while and then claimed ownership of the property.²⁰ It is said that when the disastrous effects of these laws on the landholding villages became apparent to Benito Juárez, he abandoned all attempts to make individual proprietors out of the villagers and refused to administer the law as applied to village lands in spite of the Constitution of 1857.²¹

FATE OF THE LANDHOLDING VILLAGE UNDER THE DÍAZ REGIME

During the long regime of Porfirio Díaz, the Reform Laws of 1857 were enforced rigorously against the landholding villages.²² Whereas there had been some tendency previously to assume that the laws did not apply to the agricultural sections (*terrenos de común repartimiento*) of the ejidos, Díaz issued two circulars (1889 and 1890) declaring that *all lands* of the villages must be divided and titles allotted in severalty. He called upon the governors of states to prosecute the law vigorously. The landholding villages were thus deprived of their last legal protection. Phipps estimated that at least 2,272,750 acres of communal land were allotted in severalty during the Díaz period and that practically all of it passed directly or indirectly into the hands of hacendados²³ and land companies.²⁴

There were many other ways in which the landholding villages were deprived of their lands during the Díaz regime, a few of which will be described briefly.

20. McBride, *op. cit.*, p. 135.

21. Parkes, *op. cit.*, p. 278.

22. Simpson, *op. cit.*, p. 29.

23. The word "hacendado" (the owner of an hacienda) is used so frequently throughout this book that it will not be italicized.

24. Phipps, *op. cit.*, p. 115.

I. LAW CONCERNING THE OCCUPATION AND
ALIENATION OF "TERRENOS BALDÍOS" ("IDLE LANDS")

This law, passed in 1894, grew out of an earlier colonization law (1883) and resulted in wholesale land-grabbing for speculation purposes on the part of survey companies and government officials and in widespread usurpation of village lands. *Baldíos* were defined by the law as lands which had never been lawfully alienated by the nation or legally destined to public uses. The law provided that any inhabitant of the Republic might denounce and file claim on *baldíos*. By definition, the *baldíos* could be interpreted to include most of the village lands, since the Indians were ignorant of the laws and since Díaz himself had ruled that it was definitely illegal for villages to hold land of any kind. As might be expected, the legislation was followed by widespread denunciation and incorporation of village lands into large estates. An example of the effect of this legislation upon the villagers of Yucatán is related in an editorial published in the Catholic daily, *El País*, on May 3, 1909, and quoted by Gruening:

Our readers have already read of the unspeakable performance by the Secretary of Agriculture which consists in the adjudication to Señor Don Olegario Molina of 2179 hectares of territory, adjoining his country estates in Yucatán. . . .

The business may be summarized as follows: The Secretary of Agriculture Don Olegario Molina conceded to the *hacendado* Don Olegario Molina the adjudication of these thousands of hectares as vacant (*baldíos*) and the real governor of Yucatán, Don Olegario Molina, ordered possession given to the aforesaid *hacendado*, the denouncement having been made before Tomas Avila López, agent of the *Secretaría* of Agriculture, at the head of which is Don Olegario Molina.

. . . . In the land grab were included pueblos of unfortunate Mayas, whom the *jefes políticos* had hastened to throw out of their poor earthly homes, casting them out not even as a criminal, a pernicious individual or a traitor of the country is, with passage furnished to a given destination, but as one kicks out a street cur, without caring what becomes of him, or whether he will die of hunger or thirst. . . .

This expropriation, this expulsion, has been an outrage whether these pueblos did or did not hold viceregal titles, because a right which the laws of the entire civilized world recognize and guarantee has been violated. . . .

Every time that a pueblo is despoiled of its lands, defects—for the most part imaginary—in its titles are alleged, or the lack of titles. Thus the wiping out from our jurisprudence of great unquestionable rights which immemorial possession gives has been erected into a system.

And note that in the pueblos which have just been adjudicated to Señor Molina the despoilment includes not only their *ejidos* but their v. town site

(*fundo*), the very ground on which they have erected their houses, and that which serves as public highway. . . .

But is it true that these pueblos lack titles and that their possession is not in good faith?

It is absolutely false, because they have a supreme title, created and established by the public law in Yucatán. The constitution of that state includes those pueblos in its geography, thus recognizing their legal existence and declaring them subject to its jurisdiction.

So that the taking of these *fundos* and the dissolution of these pueblos has been not only an assault on property but against the sovereignty of the State of Yucatán.²⁵

II. ALIENATION THROUGH MANIPULATION OF WATER RIGHTS

Through the law of 1888 and subsequent modifications, water rights coming under the jurisdiction of the federal government were redefined and greatly extended. At first, federal jurisdiction was extended merely to navigable streams that could be used for transportation or communication; later it was argued that the jurisdiction applied also to streams feeding into the navigable streams. The president secured authorization to grant to individuals and companies exclusive rights to use federal waters for irrigation or industrial purposes. Discrimination in granting such rights was usually favorable to those deemed "best able to profit" by such monopoly.²⁶ By these means it became possible for influential persons to obtain possession of village lands by the simple device of getting control of the water supply. This was especially effective in areas where, without irrigation, agricultural land was worthless.

III. PUNISHMENT FOR REBELLION

Some Indian villages were deprived of their lands by direct action of the government as a punishment for rebellion. Frequently, such rebellions represented merely the efforts of the Indians to protect their lands from encroachment by private estates. Sometimes punishment was meted out individually, and at other times collectively. Often the problem was solved by the simple device of apprehending the supposed leaders of the resistance and having them either transported to other areas or executed. The more important of the mass rebellions were those of the Mayas of Yucatán and the Yaquis and

25. Translation as reproduced in Ernest Gruening, *Mexico and Its Heritage* (New York: D. Appleton-Century Co., Inc., 1928), p. 128.

26. Molina Enriquez, *op. cit.*, IV, 91.

Mayos of Sonora. A description of the Yaqui rebellion and the resulting punishment is given by Parkes:

The Yaquis owned fertile valley lands which were assigned to wealthy creoles. The Yaquis, it was argued, did not make a profitable use of their lands, whereas the creoles could establish cotton and rice plantations. Under the leadership of Cajeme, a soldier who had fought with the liberals in the War of the Reform, the Yaquis took up arms and retreated into the mountains, where they defeated every army sent against them until they were finally subjugated by starvation. Ramón Corral, governor of Sonora, interviewed Cajeme after his capture, and was surprised to find that he was not a sullen and brutish savage; Cajeme was a man of some education, with a talent for military leadership. Corral, nevertheless, had him shot, while his followers were sold at seventy-five pesos a head to the plantations of Quintana Roo—a process by which Corral himself and his successor, Luis Torres, made fortunes, and which continued, in spite of the suppression of the rebellion, until 1910. Under the torrid sun of Quintana Roo most of the Yaquis rapidly died, while in Sonora the creoles grew their cotton and their rice.²⁷

There were many other policies of the Díaz regime that tended to reduce the holdings of the villages. Some of these will be discussed in the chapter which deals with the hacienda, since, in general, it may be said that policies favorable to the growth of the hacienda were unfavorable to the landholding village. Data which would indicate clearly the net result of all these measures on the distribution of landholding villages at the end of the Díaz regime are lacking. Luis Cabrera estimated that, by 1910, 90 per cent of the villages in the Central Mesa had no land whatsoever, save that on which their rude huts were standing;²⁸ McBride presents data indicating that more than 95 per cent of the heads of rural families in all but five states had no rural property of their own;²⁹ and Parkes is of the opinion that nearly half the rural population was bound to debt slavery.³⁰

27. *Op. cit.*, p. 296. Reprinted by permission of the Houghton Mifflin Company.

28. *Op. cit.*, p. 226.

29. *Op. cit.*, p. 154.

30. *Op. cit.*, p. 305.

CHAPTER V

The Hacienda (Prior to 1910)

UNTIL 1910 the hacienda system dominated the rural scene in Mexico, economically, socially, and politically.¹ The size of the hacienda was great enough to encompass a wide variety of resources, enabling a high degree of economic self-sufficiency. Through lack of communication facilities and a system of economic bondage, the majority of its resident population was "bound to the soil." The social horizon of the peons seldom extended beyond the confines of their master's property. Political and economic domination of the hacendado over the peon was facilitated by a variety of factors, including (1) the wealth and influence of the former as contrasted with the poverty and ignorance of the latter; (2) the fact that whole villages were located within the boundaries of the hacienda and hence subject to its control; and (3) the complete dependence of the peon on the pleasure of the hacendado for his livelihood.

ORIGIN AND GROWTH

In general, the factors which tended to destroy the landholding village were the very ones that contributed to the growth and influence of the hacienda. For this reason, only a few of the more important factors responsible for the growth of the hacienda will be mentioned at this time, and they will receive an emphasis different from that given in the previous chapter.

1. The term "hacienda" is used in this chapter to denote the large-scale holding which was characteristic in Mexico prior to 1910 and which usually included absentee ownership, a large resident labor force, an administrator, extensive rather than intensive agriculture, and other characteristics described in the latter part of this chapter. The term "hacienda" is generally used in Mexico to refer to such holdings, but this usage is not universal. In the southern states of Chiapas and Tabasco, for example, the term *finca* is more generally used, while "hacienda" refers to the land devoted to a specific crop. The point to be stressed here is that the term "hacienda" is being used to apply to the type of farm organization as well as to the size of holding—both factors are involved.

ROOTS IN THE NEW WORLD AS WELL AS IN THE OLD

The Spaniards were familiar with the feudalistic holdings in Spain, and when they arrived in aboriginal Mexico they found an environment favorable to the establishment of a feudalistic type of economy. As we have seen, the Indians had become accustomed to paying tribute to their rulers and to furnishing free labor on the lands set aside for the use of the nobles and the priests. They had also become familiar with the landed estates owned by especially privileged persons and tilled by serfs. In many instances, therefore, the Spaniards had merely to displace the local chieftains as tribute collectors or to use the chieftains as their agents.

THE "ENCOMIENDA"

The *encomienda*² not only served as a means of destroying the autonomy of the landholding village but facilitated the formation of haciendas as well. It was not an entirely new device, since it had previously been used by Spain in the conquest of the Balearic and Canary Islands and in the reconquest of southern Spain from the Moors.³ It fitted neatly into the developments which had taken place among the aborigines, as described previously, and enabled the Spaniards to take the place of the conquered rulers with a minimum of disturbance to existing practices.

The *encomienda* grants varied greatly in size; some of them contained numerous villages and thousands of Indians. To Cortés himself was allotted a vast concession consisting of 22 towns, including 23,000 vassals and a total population of about 115,000 inhabitants.⁴ The lands falling under his jurisdiction by means of this grant amounted to at least 25,000 square miles, located in the states of Morelos, Oaxaca, Puebla, México, and Veracruz. This grant included some of the richest farming land in all Mexico.⁵ The royal grant specified that Cortés should have the vassals and the lands, including woods, pastures, and all water, both running and stagnant. Furthermore, he was to have complete civil and criminal jurisdiction over the inhabitants.⁶ All his possessions, including some that were ac-

2. The *encomienda* is defined in the preceding chapter. Briefly, it was an allotment in trust of one or more villages to a given individual and carried with it the right to collect tribute from the inhabitants and to exact certain personal services, such as labor in the fields and the household. It was used as a means of awarding conquerors for their exploits.

3. G. M. McBride, *The Land Systems of Mexico* (New York, 1923), p. 43.

4. *Ibid.*, p. 47.

5. *Ibid.*, pp. 45, 46.

6. *Ibid.*, pp. 47, 48.

quired subsequent to the original grant, were converted into an entailed estate (*mayorazgo*) in 1535, so that they would pass undivided to his heirs. By the beginning of the nineteenth century these possessions were still largely intact and were reported to include 15 villas, 157 pueblos, 89 haciendas, 119 ranchos, 5 *estancias*, and a total population of 150,000 inhabitants.⁷ To one of Cortés' lieutenants were given towns, villages, and lands, which together constituted an area of over 10,000 square miles in what is now the state of Guanajuato. To Pedro de Alvarado was given the fertile alluvial farming district and town of Xochimilco, which contained at the time about 30,000 Indians. The conquistadors who had acquired less fame were given smaller concessions. Many had to be content with but a few villages. Some received only one, and in a few cases a single town was divided between two conquistadors.

The *encomiendas* were confined for the most part to the more densely inhabited areas, since their chief value was to be found in the tribute to be collected and the labor that could be exacted from the Indians. The total number of villages granted in *encomiendas* or the exact amount of land involved is unknown, but McBride is of the opinion that a large proportion of the inhabited region of Mexico was held in *encomienda* before the end of the first half-century.⁸ He also presents data indicating that, by the year 1572, at least 507 *encomiendas* had been granted to private individuals and that these yielded an annual tribute amounting to 400,000 pesos.⁹ To these *encomiendas*, more than to any other single factor, may be attributed the origin of the hacienda. It was not originally intended that these grants should become permanent, but their duration was extended from time to time and the *encomenderos* gradually came to regard the land as their personal property and the inhabitants as their serfs. Many had taken advantage of the *composiciones* and other measures to secure confirmation of titles to their holdings, so that when the *encomienda* was finally abolished legally in 1720 it had already been largely transformed into the hacienda.

PEONÍAS AND CABALLERÍAS

Not all the conquistadors were given *encomiendas*. To some were given small outright grants of land, with no jurisdiction whatsoever over Indians. These grants were usually of two kinds: (1) the *peonía*, consisting of about 100-200 acres and including various types of lands considered necessary for the support of a single family; (2)

7. *Ibid.*, p. 48.

8. *Ibid.*, p. 45.

9. *Ibid.*, p. 53.

the *caballería*, which was to consist of an area equal to five times that of the *peonía*. While these allotments were small in area, they frequently served as a nucleus around which to accumulate larger holdings. Many took advantage of the opportunity of doing this through the process of gradual annexation of adjoining lands and subsequent confirmation of titles. Information which would show the total land accumulations through these two types of grants is unavailable, but they are believed to be the source of a great many haciendas.

ENTAILED ESTATES

Another factor tending to perpetuate the large holding was the tendency for persons to seek titles of nobility, with which would go a *mayorazgo*. The *mayorazgo* must then remain undivided. How this tended to work out can best be described in the words of McBride:

No sooner would a colonist acquire a fortune, whether from trade, mining, the tribute of Indian villages, or the product of his farms, than he would seek a title of nobility and with his title would go the estate, which must then remain undivided. Distinguished services to the crown were also rewarded by the bestowal of a title accompanied by the creation of a *mayorazgo*, and often with a large grant of land or of tribute villages. It was this custom of forming *mayorazgos*, a custom which prevailed until the era of independence, that was largely responsible for the preservation of large estates in Mexico. Aggregation was constantly going on; division of property was almost impossible.¹⁰

ECCLESIASTICAL PROPERTIES

One of the most important sources of the hacienda is to be found in the accumulation of vast landed estates in the hands of the church. The Spaniards were familiar with the church as a landholding institution in Spain, and measures were taken which were intended to prevent a similar occurrence in New Spain.¹¹ A royal decree was issued in 1535 which forbade recipients of lands to sell them to church, monastery, or ecclesiastical persons under penalty of having them confiscated and given to others.¹² It was specifically stated that not even a site for a monastery or other religious institution could be obtained without special permit from the king or viceroy.¹³ Yet these and other measures proved to be of little avail in preventing or curtail- ing the rapid accumulation of property by the clergy. These accu-

10. *Ibid.*, p. 59. Reprinted by permission of the American Geographical Society.

11. *Ibid.*

12. Manuel Fábila (ed.), *Cinco siglos de legislación agraria en México (1493-1940)*, I (Mexico City, 1941), 14.

13. McBride, *op. cit.*, p. 59.

mulations were facilitated by the tremendous political and secular power which the clergy rapidly acquired. An indication of the political influence which they achieved may be seen from the fact that, of sixty viceroys appointed in Mexico, eleven were bishops or archbishops.¹⁴ Furthermore, the clergy enjoyed the advantage of immunity conferred on them by the *fuero*. Through this measure they could claim the right to be tried only by ecclesiastical judges and could claim exemption from taxation.¹⁵ These special concessions placed them in an advantageous position and opened up opportunities for exploitation which were limited only by their individual morality. Their opportunities for accumulating property are described by Phipps as follows:

The clergy was an economically privileged class from the beginning. The members of it received large grants of land from the crown. Many monasteries, cathedrals and individual prelates were given *encomiendas*—which had more or less the same history as those conferred upon laymen. For the erection of churches, monasteries and residences the royal treasury furnished half the money, the *encomenderos* or the Spanish population in general furnished the other half, and Indians did the work without remuneration. Ecclesiastical capital was free from taxation—legally in the early days, virtually always. The clergy were entitled to collect tithes and first fruits of all agricultural products, to receive fees, dowries, gifts, bequests, alms, and perpetual trust funds. From the outset they had an economic advantage over even the richest *encomenderos*, who had to build their own houses and provide their own working capital, and had not the sources of income that the clergy had. So, with the immense prestige of the Church behind them, it is not surprising that the clergy dominated the colonial era economically and politically. Nor is it strange that, as the years went on, the early missionary fervor tended to give place to complacent well-being and easy acceptance of priority thrust upon them; that adventurers were to be found in the ranks of the clergy as in all walks of life; that this easy means of acquiring an honorable position and a comfortable livelihood attracted such large numbers that in 1644 the town council of Mexico City implored Philip IV to send no more monks, as more than six thousand were without employment, living on the fat of the land.¹⁶

Some of the more important sources for acquiring property on the part of the church may be briefly enumerated as follows:

1. *Gifts*.—The practice of bestowing property on the church was begun by Cortés, who in his will left a large legacy for this purpose. This practice was followed by others, and gifts came to be an important means of acquiring property. Alvaro de Lorenzana, for example, at his death on November 23, 1651, "left to the Church 800,000 pesos

14. Helen Phipps, *Some Aspects of the Agrarian Question in Mexico: A Historical Study* (Austin, Tex., 1925), p. 61.

15. *Ibid.*, p. 62.

16. *Ibid.*, pp. 45, 46.

in cash, several houses, with furniture and orchards, 20,000 pesos for masses for the repose of his soul, 20,000 to the Convent of La Merced, a small legacy to each nun in the capital, and some special gifts to the Jesuits."¹⁷

2. *Fees for ecclesiastical ceremonies.*—Considerable revenue was derived from parochial fees for baptisms, marriages, funerals, confessions, and masses. The law permitted the clergy to charge three times as much for these services as was customary in Seville, and yet occasionally it was found necessary to rebuke the priests for their avarice and to urge them to observe the restrictions of the law.¹⁸

3. *Tithes and alms.*—The tithe constituted one of the principal sources of revenue for the church and was levied on the gross product of all agriculture and livestock and on incidental earnings. It included one-tenth of the products, and it was required that these be separated and delivered to the collectors daily. The collection was organized on a regular business-like basis and had the support of the civil authorities. The job was sometimes sold at public auction or farmed out in units of 25,000–100,000 pesos.¹⁹ It is estimated that toward the end of the colonial period the average annual yield from tithes amounted to over 2,400,000 pesos. In addition to the vast sums collected as tithes, alms were regularly collected, and these amounted to an annual income of considerable importance. It is said that the Convent of San Francisco in Mexico City had an annual income of 100,000 pesos from alms alone.

4. *Commerce.*—Since many of the tithes and alms were collected in kind, there gradually developed commercial enterprises owned and operated by the clergy in the form of stores and markets in which the collected products were sold. Since such products were secured practically without cost, it was easily possible to smother competition and to do a lucrative business. These commercial enterprises soon extended to mines, fisheries, and other fields of endeavor—even to the slave trade²⁰—and resulted in an important source of income for the church.²¹

5. *Indian labor.*—The clergy did not hesitate to use free Indian labor for their private enterprises whenever this seemed feasible. The government had agreed that, whenever church buildings were in need of repair or reconstruction, the Indians of the parish would be exempt from tribute in order to perform the labor for the necessary repairs. There is evidence that the clergy frequently took ad-

17. *Ibid.*, p. 49.

19. *Ibid.*, p. 49.

21. *Ibid.*, p. 56.

18. *Ibid.*, p. 51.

20. *Ibid.*, p. 46.

vantage of this concession and used Indians for their own work on a comparatively large scale. Concerning the widespread use of Indians by the church, a viceroy wrote to Philip III in 1607 as follows: "Each village employs more Indians in the service of the convent than in all departments of government, and twenty Indians do not contribute as much to Your Majesty as does one to the ministry of the doctrine."²²

A large share of the funds derived by the clergy from the above-mentioned sources was invested in real estate and in mortgages. This practice gradually resulted in setting the church up as a great landlord and banker, bringing under its control a large proportion of the lands in the entire country. When Charles IV issued a decree in 1804 that the funds which the clergy of New Spain had out on interest should be called into the royal treasury, the Bishop of Michoacán protested that this would involve the sum of 44,500,000 pesos and would result in the ruination of agriculture if such a sum were suddenly withdrawn.²³ Complete and accurate information concerning the landholdings of the church is unavailable, but what appear to be the most reliable estimates were summarized by Phipps as follows:

It is impossible to do more than guess at the amount of real property owned by the Church at the end of the colonial period. In 1796, according to a reliable and official source, the income of the clergy from rented property in the capital city alone was \$1,060,995 out of a total of \$1,911,201. This income, capitalized at five per cent would give a property valuation of \$21,219,893. The Carmelites had *haciendas* extending from the City of Mexico to Tampico, a distance of 120 leagues. Four-fifths of the real estate in the diocese of Puebla, where the Church was exceedingly strong, is said to have belonged to communities of monks and nuns, cathedral chapters, corporations and hospitals. One writer estimates the income of the clergy in 1800 at \$13,000,000 which, capitalized at five per cent, would give \$260,000,000 as the valuation of productive property. Lucas Alamán, a decided partisan of the clergy in their later struggles with the republican government, estimated that not less than half the real property and capital of the country belonged to the Church at the end of the colonial era. Most of the remainder was controlled by the clergy through mortgages. The Church was the landlord, the banker, and the trustee of the period.²⁴

The tremendous concentration of land in the hands of the church gave rise to numerous attempts to curtail the accumulation of ecclesiastical holdings and to decentralize them in the hands of individual proprietors. The first successful attempt of any importance was in the expulsion of the Jesuits in 1767 and the confiscation of their holdings. Despite a great deal of religious opposition and political cor-

22. *Ibid.*, p. 53.

23. *Ibid.*, p. 58.

24. *Ibid.*, pp. 59, 60.

ruption, this movement resulted in the sale to private individuals of at least 125 haciendas owned by the Jesuits, many of which were among the most productive in the country.²⁵

The War of Independence (1810-21) started as a social revolution to secure lands for the landless but ended as a political revolution, with independence from Spain as the major accomplishment. Agustín de Iturbide emerged as emperor of Mexico, and the church appeared to have stronger power than ever, claiming to be virtually independent of civil authority.²⁶

Several attempts were made between 1821 and 1856 to break up the holdings of the church, but these were not successful enough to affect greatly its wealth and power. The first reform that seriously affected ecclesiastical property on a nation-wide scope was the law of *Desamortización* passed in 1856 and mentioned in the previous chapter. As we have seen, this law prohibited religious corporations from holding property except that used directly for religious purposes, such as church buildings, convents, episcopal residences, colleges, hospitals, and orphan homes. The measure provided that all other real estate owned by the church should be sold in severalty to the persons to whom it was rented or leased at a price corresponding to the sum which, at 6 per cent interest, would yield an annual income equal to the amount being paid as rent; properties not so leased or rented should be sold at auction in the presence of governmental authorities. The law forbade any subsequent sale of these holdings to any religious corporation.²⁷ The essence of this law was incorporated into the Constitution of 1857. The enforcement of the measure aroused strong protest and resulted in a three years' war, in which the conservatives, consisting largely of the large landowners and the clerical supporters, were arrayed against the liberals, the latter under the leadership of Benito Juárez. In the midst of this war, Juárez issued an executive decree nationalizing all ecclesiastical property without any provision for indemnification. The decree was issued as a military expedient, and enforcement was carried out in a more or less haphazard manner, in the midst of civil strife and frequently by military leaders in need of funds for their campaigns. Much of the property was taken without any formal legal proceedings and sold at a fraction of its value. It is estimated by some writers that the Reform Laws resulted in reducing to private ownership about \$100,000,000 worth of ecclesiastical real estate and that at least 40,000

25. *Ibid.*, p. 64.

26. *Ibid.*, p. 66.

27. McBride, *op. cit.*, p. 69.

properties changed hands.²⁸ Undoubtedly, the number of landowners was increased by many thousands, but it is unlikely that any appreciable dent was made in the hacienda system, since the large majority of the confiscated estates probably passed unbroken from the church into the hands of private individuals.

POLICIES OF LAND MONOPOLY UNDER THE DÍAZ REGIME

Although land monopoly may have received a few staggering blows as a result of the Reform Laws, it quickly recovered under the regime of Porfirio Díaz. Foreign capital was encouraged, mines were opened up, railroads were constructed, and land became potentially valuable for speculative purposes. There were large areas in the north and in the coastal regions where population was sparse and where land had not been legally appropriated. There also remained vast extensions in all parts of the country which, even though occupied for generations, had not been properly deeded to the occupants by the government. These lands all technically belonged to the nation, and, under the leadership of Díaz, measures were enacted which encouraged land-grabbing schemes of colossal proportions. The law of 1883 authorized the president to contract with surveying companies to locate and measure the *baldíos*, giving to the companies, as compensation for their efforts, one-third of all the lands they surveyed. It was stipulated that the lands which they acquired as their share could not be sold in blocks of more than 2,500 hectares to any one person and that the purchaser was required to settle on the land. During the succeeding ten-year period these companies surveyed about 50,000,000 hectares, their share amounting to nearly 17,000,000 hectares. The still more radical measure, which removed all restrictions whatsoever on the sale of the lands, was enacted in 1894, making it possible to dispose of tracts without limitations as to size and with no requirement as to settlement. Furthermore, the new law revoked any penalties for infringements of the previous law; thus the gates were thrown wide open for land speculation on a huge scale. Not only were speculators able to get possession of the vacant lands, but a special provision of the law made it possible for them to denounce and file claim on lands that had been occupied for generations but whose titles were defective in one way or another. As we have seen (chap. iv), this worked greatly to the disadvantage of the landholding village and of the small owners who lived in isolated areas and did not understand the nature of the law or its importance. Orozco, referring

28. Eyler N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, 1937), p. 24.

to the results of the work carried out by survey companies, says that the large landholders succeeded in confirming and even extending their own vast domains; that the government received claim to a small amount of land in proportion to the expense involved; and that small property holders and the Indian village communities became victims of lawyers, who, under pretense of legal technicalities, succeeded in depriving them of their lands that were already inadequate to provide the necessary food for their families.²⁹

ORGANIZATION OF THE HACIENDA

Any dividing line between the hacienda and the smaller rural property often referred to as the "rancho" must, of necessity, be arbitrarily determined, since the one gradually merges into the other. Popular usage often makes the distinction on the basis of the size of holding and classifies as haciendas all holdings of more than 1,000 hectares and as ranchos those containing 1,000 hectares or less.³⁰ This distinction seems adequate for certain purposes, although it should be recognized that many holdings consisting of less than 1,000 hectares had generally been recognized as haciendas, especially in the more fertile areas of commercialized agriculture, and that many holdings with more than 1,000 hectares, especially in the semiarid northern plains, had generally been considered ranchos. Obviously, the organization of the hacienda varied according to its size and according to other factors, such as topography and climatic conditions of the region, distance from communication lines, and accessibility of Indian villages as a source of labor supply. The hacienda was more a matter of organization than of number of hectares and tended to conform to a definitely recognized pattern. This pattern of organization included the following factors:

I. ECONOMIC SELF-SUFFICIENCY

Each hacienda aspired to be self-sustaining. In order to accomplish this, its size and physical arrangement were usually such that it encompassed a wide variety of natural resources including tillable farm land, grazing lands, forest and woodlands and one or more streams controlled from the source.³¹ The tillable valley lands formed the nucleus of the hacienda, and on them could be grown the corn which served as the basic food—in some cases almost the only food—of the

29. Wistano Luis Orozco, *Legislación y jurisprudencia sobre terrenos baldíos* (Mexico City, 1895), II, 800, 801.

30. McBride, *op. cit.*, p. 82.

31. *Ibid.*, p. 27.

majority of the inhabitants. The economy of the hacienda also required forest products for fuel and for construction purposes, since, as a rule, all the equipment, including farm implements, was constructed and repaired at the hacienda. The streams not only furnished the water for both man and beast but also provided a source from which some of the more favorably situated lands might be irrigated. The pasture lands provided feed for cattle, horses, mules, and other livestock. Frequently, the larger haciendas were divided into several subunits, each with a *mayordomo* and a full complement of workers.

II. THE HACIENDA, A COMPLETE SETTLEMENT

The resident population seldom fell below a hundred inhabitants and occasionally reached as many as several thousand. The hacienda sometimes constituted a unit of local government and was incorporated as a *municipio*. It usually contained the essential supply of services characteristic of an independent community—a store, a church, a post office, a burying-ground, a jail, and occasionally a school. The houses and farm buildings, including granaries, sheds, and corrals, were all constructed of local materials by local personnel, and workshops were maintained for the making of tools, implements, and other essentials.

III. THE ADMINISTRATION

The owner was referred to as the “*hacendado*.” He may have acquired his property through inheritance, through marriage, through purchase, or through political manipulations at a fraction of its value. He was interested in the property not so much as an efficient economic enterprise as for the social prestige it would give him and his family and the security it might offer. As McBride says:

The elements which make this appeal are sufficiently obvious: pride of proprietorship, a minimum of toil, the leisurely oversight of an estate, and unlimited opportunity for the exercise of authority over humble servitors. Furthermore, the life of the *hacendado* offers ample occasion for the display of fine horses, expensive trappings, and picturesque accouterments; while the rounds of supervision call for periods of life in the open and provide the subtle attraction of occasional personal hardships and dangers. Herein lies the real value of a Mexican hacienda to its owner.³²

The hacendados have been predominantly of European descent, and, since they have usually constituted the highest social stratum of Mexican society, they have tended to intermarry or to affiliate with

32. *Ibid.*, p. 40. Reprinted by permission of the American Geographical Society.

the wealthy foreigners who entered the country.³³ The hacendado was essentially an absentee landlord, for he and his family usually spent a great proportion of their time either in foreign countries or in their home in Mexico City. Only a few months or weeks during the year were spent at the hacienda. While there, they lived in the large *casa de hacienda*. The principal building on the estate, which was usually constructed of stone or adobe, was roofed with red tiles and had large iron bars at the windows for protection. The granaries, workshops, and barns were located near by. Elaborate flower gardens, fruit trees, and shrubs often found their places in patios or in accessible plots. Frequently, the buildings and grounds were inclosed by a high adobe or stone wall, which separated them from the huts of the peons on the outside. The main buildings of the hacienda were designed not only for the ordinary uses but also for protection from armed bandits, as well as from possible uprisings on the part of the local resident population.

The occasional visits of the hacendado and his family to the hacienda, usually during the harvest or the planting season, were accompanied by a certain display of paternalism toward the resident population. A few small trinkets for the children of the peons were brought along, a few coins were distributed here and there, a local fiesta was arranged, and the hacendado was regarded more as a distinguished visitor than as an active participant in the enterprise. The supervision and management were left in the hands of an administrator, under whose direction there were several foremen or bosses, known as *mayordomos*. In cases in which the hacienda was divided into subunits, a *mayordomo* was placed in charge of each unit and was responsible to the administrator.³⁴ There was usually a *mayordomo* in charge of each major crop also. The administrator had almost unlimited authority over the hacienda community. He might ride about from one field to another on a spirited horse, with a pistol at his belt and a whip in his hand.³⁵ He did not hesitate to make use of the whipping post and the saber whenever the indolent peon seemed to need such disciplinary measures;³⁶ and if one of the peons should suddenly become too obstreperous, requiring him to make use of his pistol, the administrator could rest assured that the local authorities would readily under-

33. *Ibid.*, p. 28.

34. Frank Tannenbaum, *The Mexican Agrarian Revolution* (New York, 1929), p. 106.

35. Frank Tannenbaum, *Peace by Revolution* (New York, 1933), p. 188.

36. Orozco, *op. cit.*, II, 1095.

stand the necessity for his having to take, occasionally, such extreme measures in the interest of "self-defense." The hacendado had little knowledge concerning the ordinary routine of activities or the variety or frequency of the disciplinary measures imposed by the administrator. His main interest was in receiving the "customary" income from the property, and he left the details of management to his administrator. In addition to the administrator and one or more *mayordomos*, the hacienda usually had several work foremen, a few clerks, and a storekeeper; and on the larger haciendas it was possible to support a priest, a local police force, and possibly a schoolteacher.³⁷

IV. THE LABORING FORCE

The peons constituted the principal laboring force and were of two general types: (a) the resident peon (*peón acasillado*) and (b) the nonresident peon (*peón alquilado*). The resident peon formed the nucleus of the working force and was practically bound to the soil through a system of advanced payments, which, because of the low rate of remuneration, he was never able to repay. He and his family lived on the hacienda, and he was assured of permanent, regular employment, although at a lower rate of pay than that received by the nonresident peon, who was employed seasonally during planting and

37. Tannenbaum, *The Mexican Agrarian Revolution*, pp. 110, 111. Tannenbaum lists the types of personnel on the average hacienda as follows:

An administrator

One or more *mayordomos* (superintendents for ranchos)

Clerks (*escribientes*)

Priest (in the large haciendas)

Teacher (only rarely)

Foremen (in charge of different sections, such as cattle, special crops)

Cattle herders (*caporal* and *vaqueros*)

Heads of labor gangs (*capitanes*)

Resident indentured workers (*acasillados*, *acomodados*)

Resident crop-sharers who were also workers

Resident renters who were also workers

Renters who had crop-sharers or subrenters under them

Nonresident (temporary) renters

Nonresident (temporary) crop-sharers

Gangs of workers hired for the agricultural season (*cuadrillas*)

Workers hired by the month

Workers hired and paid by the week

Workers hired by the task system

Workers hired and paid by the day. In addition, the hacienda might have a police force of its own, a magistrate and a prison, special mule drivers (*arrieros*), sheep and swine herders (*pastores*, *maranceros*), smith, carpenters, and specialists of various kinds.

Listed with permission of Brookings Institution, Washington, D.C.

harvesting times or at other rush periods. His wages usually amounted to about 25 centavos per day, plus a few perquisites²³ as follows:

a) He was given the right to live permanently on the property of the landlord without paying rent.

b) He was given the right to regular permanent employment.

c) In some cases he was given permission to till a small plot of ground, seldom more than half an acre in size, on which he could plant a little corn for his household use. This was considered a special privilege reserved for the more trusted peons who had proved themselves worthy of special concession.²⁴

d) Each family was usually allowed about half a *cuartilla* (13.87 liters or 12.59 U.S. dry quarts) of corn per week.²⁵ In some cases this was an outright grant, and in others it was an allowance at a reduced price. On haciendas where maguey was grown, a small amount of pulque was sometimes allotted to peons.

e) On some haciendas a school was maintained to which peons could send those of their children who were not old enough to work. The type of instruction received by the children, however, was strictly limited. This is indicated by Cabrera in an account based on his personal experience:

The school exists, but its condition is such that in the year 1905 during which I served as school teacher in a principal's residence, I received as my first instructions from the administrator of the hacienda—viz. by the way, did not pay my salary since I was an official employee—to teach only reading and writing and the Catechism of Christian doctrine. It being absolutely forbidden to teach arithmetic and, above all, "those things about civic institutions which your fellows bring and which are written."²⁶

f) A further subvention was said to consist of credit at the local plantation store (*tiercio de raso*). The manner in which this worked to the advantage or disadvantage of the peon is also described by Cabrera:

hand; with his left, that is, through the *tienda de raya*, the hacendado collects the supplementary salary which he paid the laborer; all that the peon gained when he received corn, pulque, and living quarters, he returns over the counter of the *tienda de raya*. And he must return it perforce, since the system of perpetual, constant indebtedness, prevalent among all our social classes and even among ourselves, is the economic death of our poorer classes. The most characteristic instance of this system is the *tienda de raya*, where the laborer receives every day on credit what he needs for his subsistence, this advance being deducted from his pay on Sunday. He usually receives only a few cents in cash at the end of the week; the rest is merely a question of accounting.⁴²

g) A final source of supplementary income to the peon consisted of small amounts of ready cash, distributed to him two or three times a year on national holidays. The hacendado usually made these loans without any idea of recovering them, but they were always charged against the peon's account and served the purpose of keeping him perpetually in debt so that he could not leave. Again we draw upon Cabrera for a description of the impact of this system on the lives and fortunes of the peons:

The resident peon earns, for instance, 120 pesos annually, but each year contracts an indebtedness of about 30 pesos more. Those 30 pesos, which fall drop by drop on the books of the hacienda, forge the chain with which you are familiar. Even in the days to which I have referred, I have personally witnessed the inability and unwillingness of the unfortunate peons to break away from this chain; although they were certain that no one would see them, and that they could run away with or without their families, they would not do so. The peon in debt remains on the hacienda, not so much due to fear or force, as through a sort of fascination produced on him by his indebtedness; he regards it as his chain, as his mark of slavery, as his shackles. The peon never knows with certainty the amount of the indebtedness which appears on the books of the hacienda, and which sometimes reaches the tremendous sum of 400 or 500 pesos. This apparently humanitarian and Christian indebtedness, without interest, suffers no other change in the books than its division upon the death of the peon into three or four parts which are transferred to his young sons already working on the hacienda.⁴³

The nonresident peons usually lived in the near-by villages and pueblos and were available for work during rush seasons. They were formerly members of landholding villages who supplemented their income by working in the haciendas in the vicinity when needed and when their time was not taken up in the work of their own *milpas* ("cornfields"). As their lands were gradually taken over and absorbed into the hacienda, however, many of the villages were left with nothing but their *fundo legal* ("town site"), and their inhabit-

42. *Ibid.*, p. 232.

43. *Ibid.*

ants became almost entirely dependent upon what they could earn as day laborers. Some were fortunate enough to be able to hold onto a small piece of land on which to grow a little corn with which to supplement their wages. No data are available that would indicate the proportion of nonresident peons who were completely landless or the proportion which still held either a small parcel of their own or a share in the village lands. Simpson suggests that by 1910 the greater proportion, even among these nonresident workers,⁴⁴ were landless.

V. THE SHARECROPPERS

The hacienda frequently cultivated only the best lands, the irrigated, the humid, or the most favorably situated, and let the rest of the tillable land out to sharecroppers.⁴⁵ Practices in this regard varied greatly from one hacienda to another, both as to the amount of land rented and as to the renting arrangements. On some of the larger haciendas, the croppers and renters, together with their families, made up a substantial proportion of the local population. It is reported that on the Hacienda La Gavia in the state of México, which included an area of 120,000 hectares, there were 2,000 croppers and renters. These were distributed among seven ranchos or subunits.⁴⁶

Sharecropping arrangements varied widely. In some cases the hacienda furnished the land, tools, and farm animals and permitted the cropper to obtain subsistence on credit at the local store. The latter, in turn, would provide all the labor and deliver half the crop to the hacendado, adding enough more of his own share to pay for the subsistence advanced. Other arrangements provided that the cropper furnish all but the land and the seed. Since the cropper was usually placed on the poorer lands, since his advances usually came from the *tienda de raya*, possibly at a substantial markup, and since the hacendado did the bookkeeping, seldom was there anything left of the cropper's share after his debts were paid. He often began and ended the crop season in the red.

VI. UNREMUNERATED LABOR

The internal economy of the hacienda was organized in such a manner that the hacendado could require a great deal of unremunerated labor from the resident inhabitants. This was accomplished

44. For a discussion of data on this point, see Simpson, *op. cit.*, p. 36, n. 24.

45. Tannenbaum, *The Mexican Agrarian Revolution*, pp. 21, 22.

46. *Ibid.*, p. 122.

through a system known as *faenas* ("chores"). Inasmuch as the resident peons and the sharecroppers lived on the property, it was usually understood, in return for this privilege, that the administrator could call upon them or upon the members of their families to help with chores of one kind or another. Men, women, and children could be called upon to perform small tasks. The men might be required to feed and care for the livestock, while the women might assist with the cooking, cleaning, washing, or any other work necessary at the *casa de hacienda*.⁴⁷ A skilful administrator could usually manage to plan the activities so as to accomplish a great deal of work through the *faenas* without having to pay wages for it. He could also require sharecroppers and renters to work on the hacienda at various times in return for the privilege of pasturing their livestock. In some instances such labor was also obtained by requiring croppers and renters to work a specified number of days per year for each hectare of land they rented.⁴⁸

VII. METHODS OF REMUNERATION

Even when wages were paid, they were seldom paid in cash. In many instances they were merely credited to reduce slightly the debt of the individual as recorded on the books of the *tienda de raya*. In cases where there were no debts, payment for wages would usually be given in the form of credit at the store or in coupons that had value only as exchange for merchandise at the store. The *tienda de raya* was frequently the only mercantile establishment available or allowed in the vicinity of the hacienda, and, as noted previously, efficient administration tended to assume that such money as was paid out for labor on the hacienda should return to it through the *tienda de raya*.⁴⁹ Obviously, the temptations and possibilities for exploitation of the workers under such a system were enormous.

From the foregoing discussion we may conclude that the hacienda system prior to 1910 was based on land monopoly, special privileges, and exploitation of the masses of the rural population. So effective was the monopoly exercised by the large landowners that they were able to keep agricultural wages comparatively stable for more than fifty years at the same time that the cost of living was steadily rising. This could mean only increasing misery and degradation for a large

47. *Ibid.*, p. 113.

48. *Ibid.*, pp. 113, 114.

49. *Ibid.*, p. 118.

proportion of the rural population which made up the landless masses. Data concerning the relation of wages to the cost of living are presented by Simpson:

Agricultural monetary wages in Mexico remained practically stationary from 1792 to 1908, a period of [116] years. In 1792 the average daily wage for agricultural labor varied between 25 and 30 centavos; in 1891 the average minimum daily wage was 23.5 centavos, the average maximum 50 centavos and the average of all wages was 36 centavos; in 1908, the figures were approximately the same. But while wages remained the same, or showed only a slight tendency to increase, prices in pesos of the principal articles of food consumption between the years 1792 and 1908 increased as follows:

	1792	1891	1908
Corn per hectoliter	<u>1.75</u>	<u>2.50</u>	<u>4.89</u>
Rice per 100 kilos	7.60	12.87	13.32
Flour per 100 kilos	2.71	10.87	21.89
Wheat per 100 kilos	1.80	5.09	10.17
Beans per 100 kilos	1.63	6.61	10.89
Chile per 100 kilos	26.08	27.13	57.94

In other words, with wages fixed, the price of corn rose in the period in question by approximately 179 per cent, rice 75 per cent, flour 711 per cent, wheat 465 per cent, beans 565 per cent, and chile 123 per cent.⁵⁰

The data presented in this and the preceding chapter seem to indicate that the landholding village and the hacienda system could not live together, side by side. There was constant conflict between them, with the hacienda emerging from every struggle stronger and mightier than before and the village correspondingly weaker. By 1910 the great majority of Mexico's rural population was landless; the plantation owners had gained one of the greatest monopolies over the rural resources and even over the lives of the rural inhabitants that have ever been recorded in the history of any country. How could this stranglehold be broken? Protests were of no avail; legislation had repeatedly been twisted in its application to serve the interests of the exploiters; previous uprisings had ended by leaving the hacendados more deeply intrenched than before.

In 1910 a conflagration broke out in the form of a revolution which swept over the land, penetrating every nook and corner and refusing to subside for ten long years. The results of this revolution will receive extended treatment in succeeding chapters.

50. *Op. cit.*, pp. 37, 38. Reprinted from *The Ejido: Mexico's Way Out* by Eyer N. Simpson by permission of the University of North Carolina Press. Copyright, 1937, by the University of North Carolina Press.

CHAPTER VI

Agrarian Aspects of the Revolution

THE Revolution which began in 1910 is generally referred to by Mexicans as *the* "Revolution" to distinguish it from all minor rebellions and coup d'états which have occurred at various times and places throughout Mexico's history. In its incipient stages it was not an agrarian uprising, although the agrarian problem gradually emerged as the central theme during the latter phases. The actual "causes" of the Revolution are, of course, very complex. They involve the whole chain of events leading to the monopolistic control over the resources of the country as well as over the lives of the people themselves. Silva Hérzog, in a recent book, attributes the cause to four hungers of the people—hunger for freedom, hunger for land, hunger for bread, and hunger for justice.¹

Early in 1910 the landless masses were in no position to rebel. They had no leaders, no financial support, and no way of communicating with one another except by direct personal contact within the confines of a single hacienda under the watchful eye of the administrator. There were signs of restlessness here and there. The masses were becoming increasingly conscious of their degraded condition and were beginning to hear of the possibilities of a different life through reports reaching them from outside their own communities. Workers returning from the United States brought stories of better living conditions enjoyed by the rural population in that country; news spread slowly, by word of mouth, of higher wages paid in Mexico on the railroads, in the industries, and in the mines.² The gradual seeping-through of such information to the agricultural workers, whose wages had remained stable for many years notwithstanding rising prices, led to discontentment that was waiting to be harnessed into organized re-

1. Jesús Silva Hérzog, *Un Ensayo sobre la revolución mexicana* (Mexico City, 1946), p. 21.

2. Eyler N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, 1937), pp. 44, 45.

volt; but, as long as there were no leaders to interpret these problems and to organize the discontented elements into a force which could make its influence felt, nothing happened.

The leadership for the Revolution actually came from a wealthy *hacendado* by the name of Francisco I. Madero from the state of Coahuila. The motivating factor which led him to rebel was the issue of the presidential succession of 1910. Most authorities on Mexico ascribe the birth of the Revolution to an article written by an American journalist, James Creelman, and published in *Pearson's Magazine* of March, 1908. This article was based on an interview with President Díaz and quoted him as saying that Mexico was now ready for a democratic form of government; that he would not be a candidate to succeed himself at the expiration of his term in 1910; that he would welcome the organization of an opposition party which would put forward a candidate for president; and that he would gladly surrender the presidency to any candidate legally elected.³

These statements were not denied by Díaz, and they received wide circulation. Even though they were difficult for Mexicans to believe, the absence of denial made the statements appear real, and political agitation set in. Madero wrote a book entitled *The Presidential Succession of 1910*. This mildly attacked the Díaz regime and called for new blood in government positions. It was also widely circulated and probably prepared the way for rebellion in case Díaz should change his mind and should seek re-election. Several political parties were organized, including the Anti-Re-electionist party which, in 1909, nominated Madero for president and Dr. Francisco Vásquez Gómez for vice-president. Madero began to carry on an effective election campaign; but Díaz had him thrown into prison in the city of San Luis Potosí because of alleged personal attacks. Apparently, Díaz had changed his mind in the meantime and had decided, in the "interests of his country," that he would again succeed himself, even though he was now eighty years old and had ruled Mexico for about thirty years.

When the date for the election arrived in October, 1910, the Chamber of Deputies declared Díaz elected president and Corral⁴ vice-president for another six-year term. Madero escaped and fled to the United States. From San Antonio, Texas, he denounced the re-election of Díaz and assumed the title of "provisional president." He also

3. Herbert I. Priestley, *The Mexican Nation: A History* (New York, 1938), p. 396; and Ernest Gruening, *Mexico and Its Heritage* (New York, 1928), p. 91.

4. Corral was much more disliked than Díaz. It is reported that Díaz often let Corral take the blame for unpopular measures enacted by the government.

assumed leadership of armed forces in open revolt to nullify the election. His call for revolution was issued in a document under the title of the *Plan of San Luis Potosí*. It designated November 20, 1910, as a date when all citizens of Mexico should take up arms in the attempt to overthrow the existing government.⁵ The *Plan of San Luis Potosí* contained only one paragraph dealing with the agrarian problem—but this paragraph probably exerted greater influence than any other part of the document in rallying rural workers to the cause, once the Revolution was under way. The paragraph read as follows:

Through the abusive application of the Law Concerning Idle Lands [*terrenos baldíos*] many small landowners, most of them Indians, were despoiled of their lands either through resolution of the Secretariat of Development or through decision of the courts of the Republic. Since in all justice the original owners should be given back the lands so arbitrarily taken away from them, such resolutions and decisions are declared to be subject to revision and it will be required that those who obtained lands through such immoral practices, or their heirs, restore the same to the original owners, whom they should also indemnify for the damage suffered.⁶

Armed rebellion soon broke out in the northern state of Chihuahua under the leadership of Pascual Orozco, Abraham González, and Francisco Villa. On May 9, 1911, Orozco and Villa surprised everyone, even Madero, who did not realize what was happening, by storming Ciudad Juárez and winning control of it, after previously having cut the railway between that city and Chihuahua. This was a terrific blow to the prestige of the Díaz government. Prior to this time the government had been regarded as almost invincible; now it appeared to be weak. Discontented elements everywhere joined in the new movement. Emiliano Zapata began recruiting peons from the sugar plantations in the state of Morelos to make war against their masters. Rebellions broke out in more than a dozen states, while the government appeared helpless. The plight of the Díaz regime in the face of these events is described by Parkes in the following words:

The Díaz dictatorship, in appearance so invincible, was rotten with age. Díaz's policy of fomenting divisions among his followers had deprived it of all internal cohesion. Díaz had failed to introduce new blood into the administration. Two of his state governors were over eighty, six between eighty and seventy, sixteen between seventy and sixty. The majority of the generals and the cabinet ministers were equally senile; Navarro, who commanded at Ciudad Juárez, was a veteran of the War of Reform. The army had been steadily weakened; nominally

5. Francisco I. Madero, "Plan de San Luis," in Manuel Fábila (ed.), *Cinco siglos de legislación agraria en México (1493-1940)*, I (Mexico City, 1941), 210.

6. *Ibid.*, p. 209.

thirty thousand, it actually contained only eighteen thousand men, and these were unwilling conscripts badly equipped by grafting war department officials. Díaz brushed aside his war minister and assumed control himself. He pored over maps in the National Palace, sending incoherent telegrams to Chihuahua, and spoke of taking the field in person. There was nobody among his officials whom he could trust; some were too old and feeble, others already planning to leave the sinking ship.⁷

After the fall of Ciudad Juárez, events moved swiftly. On May 21, 1911, a treaty was signed, under whose terms Díaz and Corral were to resign before the end of the month and Francisco de la Barra was to assume the *ad interim* presidency and call general elections. Díaz resigned on May 25. De la Barra designated October 15 as election day. Madero had widespread popular support and experienced no difficulty in being elected president. He took office on November 6, 1911. This might have been the end of the Revolution, instead of merely a pause in it, if only Madero had possessed the executive ability to surround himself with competent and loyal associates and the vision to have comprehended the real motivating forces among the landless masses and to have initiated far-reaching reforms. Unfortunately, he surrounded himself with men who immediately began plotting behind his back for his overthrow. He appeared to have a sublime faith in the good intentions of his associates and refused to believe any reports which came to him concerning their disloyalty. Instead of laying the basis of broad agrarian reforms, he appeared to think that the problem of Mexico was essentially political and that the purposes of the Revolution had been achieved when Díaz resigned and when free elections had been held. He was more concerned about putting into effect his campaign slogan, "Effective Suffrage—No Re-election," than about carrying on any fundamental agrarian reforms.

It remained for the illiterate Indian leader, Emiliano Zapata, to focus the Revolution on the land problem. When it became evident to him that Madero did not intend to introduce widespread agrarian reforms, he rallied his followers in rebellion under the battle cry of *Tierra y Libertad* ("Land and Liberty") and demanded fulfilment of the plank in the *Plan of San Luis Potosí*. Within a short time Zapata was in control of several states and had drawn up his own *Plan de Ayala*. In this plan he denounced Madero as having betrayed the nation by failing to carry out the promises of the Revolution, and he pledged himself and his followers to fight until death or until their

7. Henry Bamford Parkes, *A History of Mexico* (Boston, 1938), pp. 319, 320. Reprinted by permission of the Houghton Mifflin Company.

principles were accepted. The plan contained the following provisions:

. . . . be it known: that the lands, woods and waters which have been usurped by hacendados, *científicos*, or *caciques*, through tyranny and venal justice, will be restored immediately to the pueblos or citizens who have the corresponding titles to such properties, of which they were despoiled through the bad faith of our oppressors. They shall maintain such possession at all costs through force of arms. The usurpers who think they have a right to said properties may present their claims before special tribunals to be established upon the triumph of the Revolution.

. . . . The great majority of the Mexican pueblos and citizens own nothing more than the soil they stand upon and are suffering the horrors of a miserable existence without being able to improve their social situation or to devote themselves to industry or agriculture because of the monopoly by the few of the lands, woods, and waters. Therefore, such properties shall be expropriated, upon indemnification to the powerful owners of one-third of such monopolies, in order that the pueblos and citizens of Mexico may obtain ejidos, colonies, town sites, and tillable lands. Thus the lack of prosperity and welfare of the Mexicans may be remedied in all respects.

. . . . The properties of those hacendados, *científicos* or *caciques* who may directly or indirectly oppose the present Plan shall be seized by the nation. . . .⁸

Upon announcing the plan, Zapata is said to have remarked:

Let Señor Madero—and with him all the world—know that we shall not lay down our arms until the ejidos of our villages are restored to us, until we are given back our lands which the hacendados stole from us during the dictatorship of Porfirio Díaz, when justice was subjected to his caprice.⁹

Zapata's stubborn adherence to the above plan, his refusal to be bribed into compromise, and the appeal of his program to the landless masses gradually forced reluctant enactment of agrarian reform measures by the federal government in self-defense.

In the meantime, Madero was losing support from both liberals and conservatives alike. This was probably due, as Parkes says, to the fact that his government was neither sufficiently idealistic nor effectively dictatorial.¹⁰ Many became convinced that he had no program at all.¹¹ While Zapata was winning victories in the south, the army generals were plotting the overthrow of Madero in Mexico City.

8. Emiliano Zapata, "Plan de Ayala," in Manuel Fábila (ed.), *Cinco siglos de legislación agraria en México (1493-1940)*, I, 215, 216.

9. Helen Phipps, *Some Aspects of the Agrarian Question in Mexico: A Historical Study* (Austin, Tex., 1925), p. 137.

10. Parkes, *op. cit.*, p. 327.

11. It has often been said that the Mexican Revolution, especially in its early stages, was devoid of any definite plan. Simpson, for example, says that at first it was a spontaneous, haphazard uprising (*op. cit.*, p. 46).

It is said that Madero was informed of this, but he thought such treachery impossible and refused to believe his advisers. On February 19, 1913, Madero was forced to resign, following his arrest by General Victoriano Huerta. He was assassinated, together with his vice-president, a few days afterward. Revolution then broke out again in full force, with Venustiano Carranza, governor of the state of Coahuila, calling for a national uprising to overthrow Huerta and to avenge the death of Madero. He gained enough strength to assume the title of First Chief of the Constitutional Army. The Revolution thus continued onward after but a brief interruption.

It is outside the purpose of the present work to trace through the various phases of the Revolution which lasted for a decade and in which former colleagues often fought against one another. We have merely tried to give enough of the background to indicate how it came about and how slowly it began to crystallize around the agrarian problem. Suffice it to say that the military phases of the Revolution did not end until late in 1920; and what is generally referred to as the "social revolution" is still going on.¹²

12. For the benefit of those interested in the political and military aspects, the following chronological sequence of events is given. This is taken from Simpson, *op. cit.*, pp. 47, 48, n. 9. Reprinted from *The Ejido: Mexico's Way Out* by Eyer N. Simpson by permission of the University of North Carolina Press. Copyright, 1937, by the University of North Carolina Press.

- "Oct. 4, 1910. The Chamber of Deputies declares Porfirio Díaz elected President for the seventh consecutive time.
- Oct. 5, 1910. Francisco I. Madero, Jr., in his *Plan de San Luis Potosí*, formally proclaims a revolution against the Díaz government.
- May 25, 1911. President Porfirio Díaz and Vice-president Ramón Corral resign in accordance with the Pact of Juárez signed on May 21, 1911, by representatives of Díaz and Madero.
- May 25, 1911. Francisco León de la Barra becomes Provisional President.
- Nov. 6, 1911. Madero assumes the Presidency following general elections held in October 1911.
- Nov. 1911. Emiliano Zapata starts a revolt in Morelos.
- Feb. 19, 1913. Madero resigns following his arrest by General Victoriano Huerta; Pedro Lascurain, Secretary of Foreign Relations, acts as Provisional President from 7:00 p.m. to 7:46 p.m.; he then resigns in favor of Huerta.
- Mar. 26, 1913. Venustiano Carranza launches a revolt against Huerta.
- July 15, 1914. Huerta resigns and is succeeded by Francisco S. Carbajal as Provisional President.
- Aug. 12, 1914. Carbajal resigns and leaves Mexico City the following day. After this, as one general after another gains the upper hand, Eulalio Gutiérrez, Roque González Garza and Francisco Lagos Chazaro serve as "President" for varying periods of time.
- Aug. 22, 1914. Carranza assumes the Executive Power as First Chief of the Constitutional Army.

We now turn to an analysis of the agrarian legislation growing out of the Revolution and forming the basis for the agrarian program that has attracted so much attention recently.

THE DECREE OF 1915

The first landmark in the direction of giving a legal answer to the agrarian aspirations of the revolutionary masses was the decree of 1915. This was later substantially incorporated into Article 27 of the Constitution of 1917 and, together with that article, became a Magna Carta for the whole agrarian movement.¹³ The decree of 1915 was issued by Carranza in desperation when his government was fighting with its back to the wall against the forces of Zapata in the south and those of Pancho Villa in the north. Both the decree of 1915 and Article 27 of the Constitution were influenced to some extent by the works of such men as Andrés Molina Enríquez, whose important book entitled *Los grandes problemas nacionales* ("The Great National Problems") did much to furnish what little theory there was to guide the Revolution.¹⁴ They also reflected the ideas of Luis Cabrera, who, influenced by the ideas of Molina Enríquez, had made an eloquent discourse before the National Chamber of Deputies, in which he painted dramatically from personal experiences a realistic picture of the wretched conditions under which the peons were living and advocated restoration of the ejidos to the villages as the only adequate solution for the agrarian problem.¹⁵

The decree of 1915 contained the following provisions:

1. That all alienation of village lands which had taken place through misapplication of the law of 1856, through illegal acts of sur-

May 1, 1917. Carranza becomes Constitutional President following general elections held during April 1917.

April 1920. The so-called "revindicating revolution" under the leadership of Alvaro Obregón, Plutarco Elías Calles and Adolfo de la Huerta overthrows the government of Carranza and Carranza is assassinated, May 21, 1920.

May 25, 1920. De la Huerta appointed Provisional President by Congress and assumes office on June 1. Elections are held with the result that on:

Dec. 1, 1920. Obregón, backed by the Liberal Constitutionalist Party, the Labor Party and the agrarians, takes office as Constitutional President. *The Revolution officially over.*"

13. Simpson, *op. cit.*, p. 54.

14. Molina Enríquez, *Los grandes problemas nacionales* (Mexico City, 1909).

15. Quotations from this discourse were cited in the previous chapter.

veying companies, or through other illegal means, should be declared null and void.¹⁶

2. That villages (of specified types) needing lands, but lacking proof of former titles which would serve as a basis for their restoration, might have the right to receive sufficient lands for their needs, such lands to be expropriated from adjacent properties.¹⁷

The decree was made applicable only to villages with *categoría política* ("political status"). It designated such villages as *pueblos*, *rancherías*, *congregaciones*, and *comunidades*. Places bearing these labels did not necessarily represent any special type of community as to either size or function.¹⁸ There were some states with very few villages bearing these designations. Villages in Mexico are classified into more than a hundred different categories, and the above designations constitute only a small portion of them.¹⁹ Furthermore, the decree completely excluded those villages that previously had been incorporated into the properties of the haciendas, since they did not have political status even though they experienced the greatest need. Therefore, even if completely enforced, the law probably would have benefited but a small proportion of the villages in need of land. There were other limitations of the law as well.

a) It placed on the villages the responsibility for furnishing evidence that they were in need of lands, and the additional burden of proving their previous ownership and unjustified alienation. Widespread illiteracy, isolation, and lack of public records made it almost impossible for villages to prove either previous possession or present needs.

b) The decree assumed that the reform could take place within the existing legal framework. It gave landowners recourse to the courts in case they felt they were being unduly injured by any expropriation proceedings. Affected landlords, accordingly, resorted to court injunctions whenever threatened, and they succeeded in delaying the program and making it ineffective through long-drawn-out legal disputes, which usually ended in their favor.

Perhaps the ones who benefited most from the decree were some of the revolutionary *políticos* and military leaders, who took advantage

16. Reproduced in Fábila (ed.), *Cinco siglos de legislación agraria en México* (1493-1940), I, 272.

17. *Ibid.*, pp. 272, 273.

18. See discussion of "Locality Groups" in chap. ii.

19. Frank Tannenbaum, *Peace by Revolution* (New York, 1933), pp. 203, 204.

of the law to further their own selfish interests. Concerning the success of the law in achieving its avowed purposes, Simpson makes the following comments:

Although the promulgation of the decree of 1915 strengthened Carranza's cause, it by no means achieved its avowed object of restoring and "insuring the peace." On the contrary, the immediate effect of the decree was to increase and intensify the anarchy and chaos into which the country had been thrown after the downfall of Huerta. Especially unfortunate in this connection was the legal right the decree gave to the many military leaders to dispose of land practically at their pleasure. As one student puts it: "Everything that could happen, did. Violence bred violence and illegality further illegality." Lands were seized by peons with or without even the most sketchy compliance with the formalities of the law. Military *caudillos* and civil authorities, anxious to gain the support of the peasants, expropriated lands right and left. Bribery, fraud and treachery were rampant and not a few "revolutionary" leaders took advantage of the situation to carve out properties for themselves. To add to the confusion and disorder, the *hacendados* stubbornly refused to acknowledge the legality of the decree of 1915 or any of the acts it sanctioned, and with guns in hand desperately defended their property. The result was an epidemic of little wars, pitched battles and assassinations. Hardly was there an hacienda in the whole Republic which was not in a state of virtual siege, or a village which did not live in mortal terror.²⁰

THE CONSTITUTION OF 1917

On September 15, 1916, Carranza issued a proclamation calling for a convention to reform the Constitution of 1857. The convention met at Querétaro on November 21, 1916, and adjourned on January 27, 1917, after having produced a most interesting and important document. The document is important, not because the ideas expressed were new or unduly radical, but because of the wide variety of advanced legislation enacted at one time and place by a country that had been living under conditions of semifeudalism. In theory, Mexico achieved at one bound what many countries have been struggling slowly for generations to attain.²¹ The essentials of the Constitution of 1857 were retained in the new one, although they were amplified and supplemented until the result was practically a new constitution.

Article 27 of the Constitution, which is the most important as far as the agrarian problem is concerned, attempted to accomplish three major objectives: (1) to define the nature of private property, (2) to indicate which individuals and institutions may or may not hold pri-

20. *Op. cit.*, pp. 61, 62. Reprinted from *The Ejido: Mexico's Way Out* by Eyler N. Simpson by permission of the University of North Carolina Press. Copyright, 1937, by the University of North Carolina Press.

21. *Ibid.*, p. 63.

vate property, and (3) to set forth a formula for the solution of the agrarian problem.²²

In view of the importance of this article as a source from which all subsequent agrarian legislation stems, it seems advisable to reproduce some of the principal sections and to regroup them according to the above objectives.²³ The complete text of Article 27 containing all revisions up to April, 1947, is reproduced as Appendix B.

1. The nature of private property.

a) Original ownership of lands and waters rests with the nation but may be transmitted by it to private individuals:

The ownership of the lands and waters comprised within the boundaries of the national territory is vested originally in the Nation, which has had, and has, the right to transmit title thereof to private persons, thereby constituting private property [par. 1].

b) The nation is direct owner of waters, mineral deposits, and subsoil, and these are inalienable and imprescriptible. Private parties may be granted rights of exploitation only under specified conditions:

In the Nation is vested the direct ownership of all minerals or substances which, in veins, ledges, masses or ore-pockets, form deposits of a nature distinct from that of the earth itself, such as the minerals from which industrial metals and metaloids are extracted; deposits of precious stones, rocksalt and the deposits of salt formed by sea water; products derived from the decomposition of rocks, when subterranean works are required for their extraction; mineral or organic deposits of materials susceptible to utilization as fertilizers; solid mineral fuel; petroleum, and all solid, liquid or gaseous hydro-carbons [par. 4].

In the Nation is likewise vested the ownership of the waters of the territorial seas, to the extent and within the limits fixed by International Law; of the waters of lagoons and estuaries which connect intermittently or permanently with the sea; of the waters of inland lakes of natural formation which are directly connected with streams having a constant flow; of the waters of rivers and their direct or indirect tributaries from the source of their first permanent, intermittent or torrential waters to their outlet into the sea, lakes, lagoons or estuaries of national ownership; of the waters of streams having a constant or intermittent flow and of their direct or indirect tributaries, whenever the bed of the former, throughout the entire extent or part of same, forms National or two State boundary lines or passes from one State to another or crosses the National boundary line. . . . Any other waters not comprised in the foregoing enumeration shall be deemed as an integral part of the property through which they flow, . . . but if

22. *Ibid.*, p. 65; and Frank Tannenbaum, *The Mexican Agrarian Revolution* (New York, 1929), chap. xi.

23. The arrangement of the paragraphs in the Constitution as presented here follows Simpson, *op. cit.*, pp. 66-71. The quotations from Article 27 of the Constitution are based largely on the English translation by Asociación de Empresas Industriales y Comerciales, including amendments to April, 1947.

located on two or more properties the utilization of such water shall be considered of public welfare, and shall be subject to the rulings that may be passed by the States [par. 5].

In the cases to which the two preceding paragraphs refer, the ownership of the Nation shall be inalienable and imprescriptible; and concessions shall only be granted by the Federal Government to private individuals or civil or commercial corporations organized in accordance with Mexican laws, on condition that regular works are established for the utilization of said resources and that all requisites set forth in the laws are complied with [par. 6].

No concessions will be granted in the case of petroleum, or solid, liquid or gaseous hydro-carbons, and the respective Regulating Law will specify the form in which the Nation will carry out the exploitation of such products [par. 7].

c) In transmitting the surface of the land as private property to individuals, the nation reserves the right to impose limitations in the interests of the public welfare:

The Nation shall at all times have the right to impose on private property such limitations as the public interest may demand, as well as the right to regulate the utilization of natural resources which are susceptible of appropriation, in order to conserve them and to insure a more equitable distribution of public wealth. With this end in view, the necessary measures shall be taken to divide up large landed estates; to develop small landed holdings in operation; to create new agricultural communities with the indispensable lands and waters; to encourage agriculture in general and to prevent the destruction of natural resources, and to protect property from damage to the detriment of society. Centres of population which at present either have no lands or water or which do not possess them in sufficient quantities for their needs, shall be entitled to grants thereof, which shall be taken from adjacent properties, the rights of small landed holdings in operation being respected at all times [par. 3].

d) The nation's right to expropriate private property is limited:

Private property shall not be expropriated except for reasons of public utility and subject to payment of indemnity [par. 2].

e) The liability of the nation in expropriating private property is also limited:

The Federal and State laws shall determine, within their respective jurisdictions, those cases in which the occupation of private property shall be considered of public utility; and, in accordance with the said laws, the administrative authorities shall make the corresponding declaration. The amount fixed as compensation for the expropriated property shall be based on the sum at which the said property shall be valued for fiscal purposes in the cadastral or revenue offices, whether this value be that manifested by the owner or merely impliedly accepted by reason of the payment of his taxes on such a basis. The only point which shall be subject to expert opinion and to judicial determination is the increase in the value of the private property, on account of improvements, or its depreciation

e) Communal property is legalized:

The centres of population which, *de facto* or by right, are subject to communal regime shall have legal capacity to enjoy common possession of the lands, forests and waters belonging to them, or which have been restored to them, or which may be restored to them [Sec. VII].

3. Formula for the solution of the agrarian problem.

In addition to defining property rights and imposing restrictions on all private property, the Constitution sets forth a formula for the solution of the agrarian problem. This includes (1) the restoration of lands to villages; (2) the outright grant of lands to villages in cases where they are needed, even though prior ownership cannot be proved; (3) the recovery of national lands and waters that were alienated in opposition to the public welfare during the Díaz regime; (4) the destruction of the latifundia by limiting legally the size of private landholdings. The wording of the Constitution on each of the above points is as follows:

a) The restoration of lands to villages:

The following are declared null and void:

(1) All alienations of the lands, waters and woodlands of villages, towns, settlements or communities made by mayors ("jefes políticos"), State Governors or any other local authority in violation of the Law of June 25, 1856, and other relative laws and rulings;

(2) All concessions, compositions or sales of lands, waters and woodlands made by the Ministry of Development, or of Finance, or any other Federal authority, from December 1, 1876, to date encroaching on or illegally occupying ejidos, lands of common allotment, or of any other class belonging to towns, villages, settlements, or communities and centres of population;

(3) All proceedings with regard to surveys or fixing of boundaries, transactions, alienations, or sales by auction carried out during the period of time referred to in the preceding subclause, by companies, judges or other authorities of the State or of the Federation, entailing encroachments on or illegal occupation of the lands, waters and woodlands of ejidos, holdings of common allotment or holdings of any other kind belonging to centres of population.

The sole exception to the aforesaid nullity shall be the lands to which title has been granted in allotments made in strict accord with the Law of June 25, 1856, held by persons in their own name for more than ten years and composed of not more than 50 hectares [Sec. VIII].

b) The outright grant of lands to villages:

Centres of population which have no ejidos or are unable to have same restored to them due to lack of title, impossibility of identifying such lands, or because they have been legally alienated, shall be granted sufficient lands, forests and waters to constitute same, in accordance with their requirements; in no case shall they fail to be granted the amount of land which they need, and for that

purpose land shall be expropriated by the Federal Government and be taken from that adjacent to the villages in question . . . [Sec. X].

c) The recovery of national lands:

All contracts entered into and concessions granted by former Governments from and after the year 1876 which have resulted in the monopoly of lands, waters and natural resources of the Nation by a single individual or corporation are declared subject to revision, and the Executive of the Union is authorized to declare those null and void which imply serious detriment to public interests [Sec. XVIII].

d) The enactment of federal and state laws to break up the latifundia:

The Congress of the Union and the State Legislatures, within their respective jurisdictions, shall pass laws fixing the maximum extent of land for rural property and measures governing the division of excess lands, in accordance with the following bases:

(1) The maximum area of land which an individual or legally organized company may own in the Federal District and in each State and Territory shall be fixed.

(2) The excess of the area thus fixed shall be subdivided by the owner within a time-limit set by the laws of the respective locality; and these subdivisions shall be offered for sale on such conditions as may be approved by the respective Governments, in accordance with the said laws.

(3) If the owner shall refuse to make the subdivision, this shall be carried out by the local Government, by means of expropriation proceedings.

(4) The value of the lots shall be paid for in annual instalments, sufficient to amortize the principal and interest, at a rate of interest not exceeding three per cent per annum.

(5) Landowners are obliged to accept bonds of the local Agrarian Debt to guarantee payment of the property expropriated. With this end in view, the Congress of the Union will pass a Law empowering the States to create their own Agrarian Debts.

(6) No subdivision of property will be allowed unless all agrarian requirements of adjacent communities have been satisfied. Agrarian cases shall be handled within a definitely fixed period whenever there exist projects for the subdivision of lands.

(7) Local laws shall provide for the organization of the family patrimony, determining the property of which it should consist and on a basis of its being inalienable and in no case subject to legal attachment or encumbrances of any kind [Sec. XVII].

From the foregoing paragraphs, it is clear that the Constitution of 1917 subordinates the rights of the individual to the welfare of society and authorizes the government to alter the rights of private property holders in the interests of the national welfare. The principal change

of emphasis in the Constitution of 1917 over that of 1857 is described by Molina Enríquez as follows:

The spirit of the Constitution of 1857 was essentially individualistic, that of 1917 is eminently collectivistic.

Under the Constitution of 1857, in the case of a conflict between the individual and society, or the individual and the state, the first mentioned had the advantage; under the Constitution of 1917, it is the second which should dominate.

Under the Constitution of 1857, in conflicts between vested interests and private individuals, it was the interests which prevailed; under the Constitution of 1917, the private individual should triumph.²⁴

Article 27 does not prescribe any one type of landholding as the accepted pattern for society. It legalized the landholding village, not for the purpose of displacing individual private property, but as the means of recognizing the only type familiar to a fairly large segment of the rural population. It still allowed a place for private landholdings under such limitations as public interest might require.²⁵

Although the Constitution of 1917 laid a solid foundation for agrarian reform, no important steps were taken to implement this document until several years afterward. The Carranza government tended to forget the agrarian problem and to rest on its laurels for having won the fight for "No Re-election" and for having avenged Madero. Although some of the five hundred generals of the revolutionary army who had acquired strong appetites for booty and plunder proceeded to feather their own nests by looting haciendas and appropriating lands for themselves, the land-hungry peasants received little or no relief from their miseries. It began to appear as though one ruling class had merely displaced another.

The peasants, however, were not to be satisfied with mere paper reforms or with a mere change in the personnel of the exploiting officials. Zapata rallied his followers in the south, and in March, 1919, sent a stinging open letter to Carranza which contained an indictment, part of which read as follows:

As a citizen; as a human being with the right to think and speak out; as a peasant knowing the necessities of the humble people to whom I belong; as a revolutionary . . . who has had an opportunity to know the national soul . . . with its miseries and hopes . . . I address myself to you. . . .

Since you first had the idea of rebelling . . . since you first conceived the project of making yourself Chief and director of the misnamed "constitutionalist"

24. Molina Enríquez in "El Artículo 27 de la constitución federal," pp. 2, 3, quoted in Simpson, *op. cit.*, p. 64.

25. Simpson, *op. cit.*, p. 73.

cause, you . . . have tried to convert the revolution into a movement for your own gain and that of your little group of friends . . . who helped you to get on top and are now helping you to enjoy the spoils of war: riches, honors, business, banquets, luxurious fiestas, Bacchanalian pleasures, orgies of satiation, of ambition, of power and of blood.

It has never crossed your mind that the Revolution was for the benefit of the masses, for that great legion of the oppressed which you aroused with your preachings. . . .

In the agrarian reform [you have betrayed your trust]; haciendas have been given or rented to [your] favorite generals; the old landlords have been replaced in not a few cases by modern landholders dressed in *charro* costumes, military hats, and with pistols at their belts; the people have been mocked in their hopes.

The ejidos have not been returned to the villages . . . nor have lands been distributed to the workers, the poor peasants and those truly in need. . . .²⁶

Carranza showed no disposition to distribute lands to peasants on any large scale. Obregón revolted against him in 1920 for the avowed purpose of carrying out the true objectives of the Revolution. Dissatisfaction was so great with the Carranza regime that very little opposition was encountered, and within the short space of eight months the government had been overthrown, Carranza had been assassinated, and Obregón sat in the presidential chair.²⁷

The coming into power of the Obregón administration is usually considered as marking the end of the military phase of the Revolution. From then forward, serious, though intermittent, attempts were made by the government administrations to implement the Constitution of 1917 and to bring about the social revolution therein legalized. The enthusiasm with which the Reform Laws were carried out fluctuated greatly as one administration succeeded another, yet the ejido program began gradually to emerge as a principal objective of the social revolution and as one of the chief criteria by which the success of the Revolution was to be measured.

26. Cuadros Caldas, quoted in Simpson, *op. cit.*, p. 80.

27. The number of the more important revolutionary leaders who met death by assassination, rather than in battle, is surprisingly large. Among these, Madero was assassinated on February 22, 1913; Abraham González was seized and thrown under a moving train a few days later; Felipe Angeles was executed by a firing squad in 1918; Zapata was murdered in April, 1919; Carranza was assassinated in May, 1920; Villa was assassinated in the summer of 1923; Obregón was assassinated on July 17, 1928.

The Redistribution of Land

THE total amount of land distributed by the Mexican government to peasants as a part of the agrarian program during the period 1916-45 amounts to 30,619,321 hectares, or 75,660,317 acres. This land was distributed to a total of 1,732,062 individuals. The area involved constitutes 15.5 per cent of the total area of the Republic and 23.3 per cent of the total area included in the agricultural census of 1940. The amount of land distributed, by years, during the entire period is shown in Table 19 and Figure 16. The starting-point is the year 1916—one year after the Carranza decree was issued providing the legal basis for the land-redistribution program. No land was distributed in 1915, although the decree was issued in January of that year. During the period 1916-20 the Carranza administration did little to provide for the implementation of either the decree or Article 27 of the Constitution. The procedure by which villages could acquire land was made so complicated by the Carranza government that, considering the ignorance, poverty, and isolation of the masses, few could hope to qualify for receiving it. The Obregón administration (1920-24) simplified the procedure and gradually worked out a program for putting into effect the measures legalized by the Constitution. The rate of land distribution was gradually accelerated during this period.

Obregón's successor, Calles, was a firm believer in the institution of private property, and he regarded the ejido as a training school which should be encouraged for the purpose of developing a nation of peasant proprietors. In order to promote it, he had a law enacted which would permit the crop lands of the ejidos to be divided into plots among the individual members. During his administration (1924-28) he distributed much more land each year than did his predecessor, Obregón. The one-year administration of Portes Gil (1929) reached the high point in the distribution of land for any one-year period up to that time, with 1,003,124 hectares distributed to

103,654 peasants. The succeeding years, from 1930 to 1933, as may be seen from Figure 16, were marked by drastic and continuous decline in the redistribution program. The low point was reached in 1933, when only 188,889 hectares were distributed—the smallest number for any one year since 1922. This decline represents the period when President Calles was “choosing” the presidents and dictating their policies. He was regarded as the *Jefe Máximo de la Revolución* (“Supreme Chief of the Revolution”) and was the acknowledged boss of Mexico. Following his return from a trip to France in December, 1929, he gave a series of interviews with representatives of the press,

TABLE 10

TOTAL AREA OF LAND DISTRIBUTED UNDER THE AGRARIAN PROGRAM
AND AVERAGE SIZE OF ALLOTMENT, BY YEARS, 1915-45*

YEAR	TOTAL NO. OF HECTARES DISTRIBUTED	TOTAL NO. OF PERSONS RE- CEIVING LAND	AVERAGE NO. OF HECTARES RECEIVED PER PERSON		
			Total	Crop Land	All Other
1915.....					
1916.....	1,246	182	6.8	6.8	.....
1917.....	5,491	1,536	3.6	3.3	0.2
1918.....	63,202	14,099	4.5	2.1	2.4
1919.....	37,639	14,849	2.5	1.6	0.9
1920.....	58,903	15,384	3.8	1.8	2.0
1921.....	173,307	25,268	6.9	2.6	4.2
1922.....	113,157	14,629	7.7	2.2	5.6
1923.....	257,547	30,319	8.5	3.1	5.4
1924.....	580,661	64,081	9.1	3.1	6.0
1925.....	723,957	78,837	9.2	3.5	5.6
1926.....	758,055	76,728	9.9	2.7	7.2
1927.....	888,917	81,234	10.9	2.5	8.4
1928.....	608,949	60,155	10.1	2.3	7.9
1929.....	1,003,124	103,654	9.7	2.8	6.9
1930.....	697,124	65,655	10.6	2.5	8.1
1931.....	600,986	48,792	13.7	2.9	10.8
1932.....	340,075	20,729	16.4	2.8	13.6
1933.....	188,889	16,733	11.3	4.1	7.1
1934.....	676,037	55,271	12.2	4.0	8.3
1935.....	2,900,226	178,995	16.2	4.8	11.4
1936.....	3,303,787	198,278	16.7	5.5	11.3
1937.....	5,016,321	184,457	27.2	6.4	20.8
1938.....	3,206,772	115,014	27.9	6.8	21.1
1939.....	1,746,890	65,957	26.5	6.6	19.9
1940.....	1,716,581	71,818	23.9	7.4	16.5
1941.....	897,082	33,271	27.0	7.0	20.0
1942.....	1,174,232	27,275	43.1	6.2	36.8
1943.....	1,178,859	36,688	32.1	6.7	25.4
1944.....	1,102,246	21,581	51.1	7.4	43.7
1945.....	598,969	15,593	38.4	8.3	30.0
Total.....	30,619,321	1,732,062	17.6	4.6	13.0

* Data compiled from the records of the Departamento Agrario.

during which he displayed evidence of having changed his mind with respect to continuing the land-redistribution program. In June, 1930, he is reported to have expressed himself as follows on the subject of the agrarian reform:

If we want to be sincere with ourselves we will have to confess as sons of the revolution that agrarianism, as we have understood it and practiced it up to the present time, is a failure. The happiness of the peasants cannot be assured by giving them a patch of land if they lack the preparation and the necessary ele-

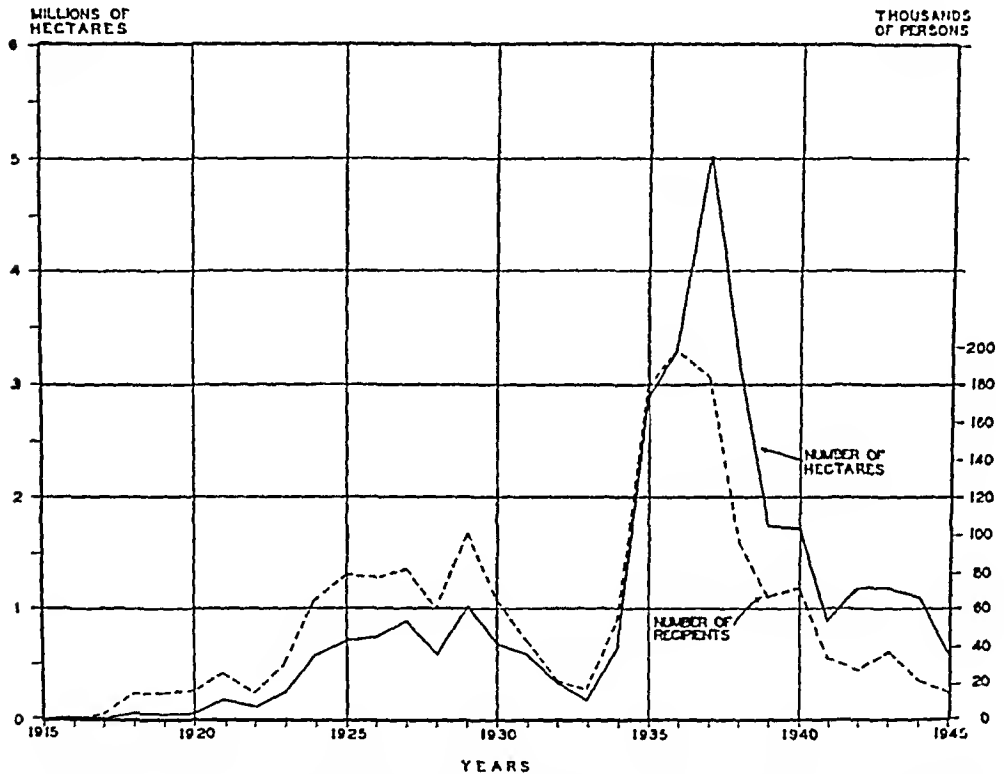


FIG. 16.—Number of hectares of land distributed and number of persons receiving land under the agrarian program, 1915-45, by years. Based on Table 19.

ments to cultivate it. . . . On the contrary, this road will carry us to disaster, because we are creating pretensions and fomenting laziness.

It is interesting to observe the great number of ejidos in which the land is not cultivated; and, still, it is proposed to enlarge these ejidos. Why? If the ejido is a failure, it is useless to enlarge it. If, on the other hand, the ejido is a success, then it ought to have money to buy additional land needed and thus relieve the nation of further costs and promises to pay.

. . . . Up to the present we have been handing out land right and left, and the only result has been to load the nation down with a terrific financial burden. . . .

What we must do is to put an "up to here and no further" to our failures. . . . Each one of the state governments should fix a relatively short period within which the communities still having a right to petition for lands can do so; and,

once this period has passed, *not another word on the subject*. We must then give guarantees to everybody, little and big agriculturists [alike] so that initiative and private and public credit will be revived.¹

The influence of the changed attitude of Calles seemed likely to bring an end to the whole land-redistribution program. Under the Ortiz Rubio administration (1930-32) dates were set as deadlines in about a dozen states beyond which no more land was to be distributed. In most cases these dates allowed for only a few months in which to finish the entire program. Obviously, few persons could qualify for land in this short period unless they had already applied. President Abelardo Rodríguez (1932-34), who replaced Ortiz Rubio after the latter's resignation, canceled these dates and showed an inclination to continue the agrarian program. Near the end of his administration in 1934, the laws and regulations concerning the methods and procedures for the redistribution of land, as well as those for the functioning of the ejidos, were organized into an Agrarian Code, which was to form the basis for future action.

When Lázaro Cárdenas was elected president in 1934, it was generally assumed that he would follow the dictates of Calles and that the agrarian program would gradually be liquidated. Such ideas were soon dispelled. Cárdenas spent a good share of his time traveling among the villagers, frequently by muleback, studying their problems at firsthand and listening to their grievances. On the basis of information thus obtained, he resolved to carry out the agrarian Reform Laws with utmost dispatch, and he streamlined the governmental machinery for doing so. In order to remove possible obstacles to his program, he deported the former *Jefe Máximo* to the United States.

During the Cárdenas regime (1935-40) more land was distributed than in all previous administrations put together. In not a single year of the six-year term did the area distributed fall below 1,700,000 hectares, while in 1937 it reached a total of over 5,000,000 hectares.

Prior to Cárdenas, many politicians had thought of the ejido program as a more or less temporary measure, designed to prepare the Indians for becoming private property holders.² They thought of the ejido mostly in terms of subsistence agriculture that would serve to supplement the wages of agricultural workers. They tended to shy

1. Conversation of General Calles "with a group of friends," as reported in *El Universal*, June 23, 1930, and quoted in Simpson, *op. cit.*, pp. 113, 114.

2. Luis Cabrera (Lic. Blas Urrea), *Veinte años después* (Mexico City, 1932), pp. 272, 273.

away from the expropriation of haciendas that had developed a highly commercialized agriculture through the use of modern machinery and efficient methods and techniques of production. Cárdenas, on the contrary, was convinced that the ejido must become a fundamental part of the national economy, and he proceeded to expropriate and redistribute some of the most highly developed farming areas in Mexico. These comprised, among others, the famous cotton-producing areas in the Laguna region, consisting of 447,516 hectares,³ located in the states of Durango and Coahuila; the sugar-producing regions of Los Mochis in Sinaloa and El Mante in Tamaulipas; the wheat and rice areas of the Yaqui Valley in Sonora; the coffee plantations in the Soconusco of southern Chiapas; the cotton and wheat area of the Mexicali Valley in Baja California Norte; the henequen region of Yucatán; and the rice, cattle, and lime plantations of Lombardía and Nueva Italia in Michoacán.

The peak of land distribution was reached in 1937; then a sharp decline occurred in 1938 and 1939 (Fig. 16). Nearly the same amount of land was distributed in 1940 as in 1939—slightly more than 1,700,000 hectares for each year. The decline from 1937 was probably due partly to the fact that the available haciendas for expropriation were becoming scarce and partly to the social and economic confusion resulting from such a sudden and widespread altering of existing land-tenure relationships. The rural economy had undergone a major operation, and attention had to be given to the convalescence of the patient lest he fail to survive the ordeal. Tremendous problems confronted the administration: the new ejidos needed organizing; agricultural credit had to be provided; boundary disputes required settlement. There is no evidence that the decline represented any change in the attitude of Cárdenas toward the importance of the ejido program.

The first four years of the Avila Camacho regime did not show any radical withdrawal from the land-redistribution program. It is true that his first year in office (1941) was accompanied by further decline in the amount of land distributed; even so, he allotted a total of 897,082 hectares, which is more than that distributed in any one year prior to the Cárdenas regime, with the exception of 1929, when Portes Gil distributed more than 1,000,000 hectares. In 1942, Avila Camacho distributed 1,174,232 hectares. He distributed more than 1,000,000 hectares in 1943 and again in 1944. In 1945 there was an

3. Liga de Agrónomos Socialistas, *La Comarca lagunera* (Mexico City, 1940), p. 59.

abrupt drop, with only 598,969 hectares distributed. This probably represents the view of the administration that large private holdings which would make good farm land are now scarce.

Before making further analyses of the types of land distributed and of the persons receiving it, we shall turn to a brief summary of the rules and regulations under which redistribution took place. An attempt will be made to answer, among other questions, the following: What types of land grants are made? Who are eligible recipients of the various types of grants? How are the lands acquired for distribution? What is the procedure for distributing land? What are the rules governing its tenure?

TYPES OF GRANTS

Three types of land grants are made to peasants under the terms of the agrarian program.

I. RESTITUTION

As the term implies, restitution involves a restoration of lands that had been taken away from villagers illegally. This was the only method originally used. The agrarian problem was at first considered simply as one of restoring to villages the lands which they had previously lost. In most cases the burden of proof of previous possession and of subsequent illegal despoliation rested on the villagers. In the absence of written titles and legal documents and in view of widespread illiteracy and poverty, proof was difficult, if not impossible, to establish. As long as this was the principal basis for distributing land, very little was restored. During the entire period from 1916 to 1944, only 6 per cent of the total land distributed was by the method of restitution.

II. "DOTATION" OR OUTRIGHT GRANT

During the early part of the program it became obvious that few villages could prove previous possession; consequently, if the agrarian problem were to be solved, a method had to be devised which would permit the granting of land to landless villagers whether or not they could prove previous possession and subsequent despoliation. The method of "dotation" was developed to meet this need, and from this source have come most of the land grants. Of the total land distributed from 1916 to 1944, 79 per cent was through the process of dotation.

III. AMPLIFICATION

As the term implies, this is a grant designed to enlarge the holdings of the villages when it can be shown that their present lands are inadequate for their needs. Fifteen per cent of the total land grants from 1916 to 1944 consisted of amplifications.

ELIGIBLE RECIPIENTS OF LANDS

The basic unit for allotting grants of land of any type is the village or rural community. The government does not recognize or act upon petitions from isolated individuals.

I. ELIGIBILITY FOR GRANTS BY RESTITUTION

Villages which can prove that they were illegally deprived of their lands are entitled to have them restored. Concerning eligibility for receiving grants by means of restitution, the Agrarian Code reads as follows:

The centres of population which had been deprived of their lands, woods or waters by any of the acts referred to in Constitutional Article 27 shall be entitled to have their property restored to them whenever it is proven:

I. That they are the owners of the lands, woods or waters whose restitution is petitioned.

II. That they were despoiled of same by any of the following acts:

(a) Alienations made by Political Chiefs, State Governors or any other local authority, in violation of the provisions of the Law of June 25, 1856 and other relevant laws and rulings.

(b) Concessions granted or deals or sales made by the Ministry of Development, Ministry of Finance or any other Federal authorities, from December 1, 1876 to January 6, 1915, whereby the property whose restitution is petitioned was invaded or illegally occupied.

(c) Survey or demarcation of boundary proceedings, deals, transactions, transfers or auction sales effected during the period of time referred to in the preceding Sub-Clause, by companies, judges or other authorities of the States or of the Federation, whereby the property whose restitution is petitioned was invaded or illegally occupied [Art. 46].⁴

II. ELIGIBILITY FOR GRANTS BY DOTATION

Qualifications for receiving outright grants are divided into two groups. The first group concerns the eligibility of the *village* or population center for receiving a grant. The second deals with the eligibility of *individuals* residing in the village or population center to participate in the grant.

a) *Eligibility of the village*.—Ordinarily, a village is entitled to re-

4. *Nuevo código agrario* (Mexico, 1943). Quotations from the Agrarian Code are from the English translation by Asociación de Empresas Industriales y Comerciales.

II. He or she must have resided in the petitioning village for at least six months prior to the filing of the petition or the institution of the routine proceedings, unless it is the case of creation of a new centre of population or of peasants who must be located on the excess land of communal holdings.

III. He or she must personally work the land as an habitual occupation.

IV. He or she must not own in their own name nor hold lands having an equal or larger area than the grant unit.

V. He or she must not possess capital invested in an industry or commercial activity exceeding 2,500 pesos or agricultural capital exceeding 5,000 pesos [Art. 54].

In addition to the above general individual qualifications, the Agrarian Code devotes a special article to the eligibility of resident peons on the haciendas and one to students of agricultural schools. Throughout most of the period of agrarian reform, the resident peon on the hacienda has been excluded from the benefits of agrarian legislation. It was assumed that land grants were for residents of "independent" villages and that peons living on haciendas were under contract as farm laborers and, as such, were ineligible to receive land. Not until the first Agrarian Code was published in 1934 did resident peons receive any right to share in the redistribution of lands; even then this right was strictly limited. They were authorized by the code of 1934 to make petitions for being included in grants to non-hacienda villages within a radius of 10 kilometers from where they were living or to petition for the right to be allotted parcels of land that had been abandoned by other ejidatarios. They were also authorized to request permission to be included in the government's program for establishing new centers of population or for establishing colonization projects. In any case they were required to leave the hacienda village and affiliate with some other group if they were to receive land. President Cárdenas decided that these restrictions were preventing the most needy of the rural population from receiving lands, and, by special decree on August 9, 1937, he abolished the article of the Agrarian Code containing these restrictions. This decree made it possible for resident peons to receive the same agrarian rights as other segments of the rural population, and it greatly increased the number of haciendas that could be affected by expropriation. The article in the new Agrarian Code concerning the eligibility of resident peons reads:

The peons or workers on haciendas are entitled to be considered as eligible to receive land in the manner set forth in Article 54. They shall therefore be taken into account in the census made, in the agrarian proceedings instituted at their request, or in those instituted by centres of population located within the

radius from which lands can be taken, in which cases the agrarian authorities shall proceed as a matter of routine. They are also entitled to be placed on excess lands restored or granted to a centre of population and to obtain a grant unit free of charge in the centres of population set up by Federal and State institutions which are specifically authorized by the Federation for the purpose [Art. 56].

Recently a provision was inserted into the Agrarian Code making it possible for graduates of Mexico's vocational schools of agriculture to receive land. Most of the graduates are sons of peasants, and after finishing their school work they have experienced some difficulty in finding employment. It was originally intended that they should go back to their home communities to live, yet most of them are reluctant to do so.⁵ The government has recently ruled that they may be settled in special colonies on lands distributed under the agrarian program. Two such colonies have been formed. The enabling law reads:

Students who finish their courses in the Special Medium or Sub-Professional Agricultural Schools and who fulfill the requisites specified in Sections I, IV and V of the preceding Article shall be entitled to be considered as eligible peasants in the census made at their place of origin, to form part of new centres of agricultural population, and to be placed on the vacant plots of other communal holdings. For this purpose they should be considered as coming within category IV of Article 153 [Art. 55].

SOURCE OF LANDS FOR REDISTRIBUTION

The lands for redistribution to any given village are to be taken from public or private holdings located within a 7-kilometer radius of the center of the petitioning village. Wherever suitable federal, state, or municipal properties are available, these are to be taken in preference to private holdings, but, when not available, private properties may be expropriated. Any private holding within this radius is subject to seizure except for certain specified exemptions, which, in general, are as follows:

1. An area not exceeding 100 hectares of irrigated or humid land, or 200 hectares of seasonal land, or the equivalent in other types of land. For exemption purposes, each hectare of irrigated land is equivalent to 2 hectares of seasonal, 4 hectares of good pasture land, or 8 hectares of woodland or pasture land located in barren country.

2. Up to 150 hectares of land used for the cultivation of cotton, if irrigated by river water or by pumping system.

3. Up to 300 hectares with ordinary plantations of bananas, coffee,

5. See chap. xvii.

On December 3, 1946, President Miguel Alemán sent a bill to the legislature requesting an addition to the above article. This became law on February 12, 1947, and reads as follows: "The owners or possessors of agricultural or livestock holdings to which has been given, or to which in the future may be given, a certificate of inaffectability, may instigate injunction proceedings against the illegal deprivation or encroachment on their lands."

It will be remembered in this connection that Article 27 of the Constitution of 1917 provided for indemnity of expropriated lands equal to the assessed value of the property affected, plus 10 per cent, and provided for the issuing of agrarian bonds to cover the government debt thus involved. There has been little attempt as yet by the government to redeem the bonds, and hacendados generally consider them worthless. Many do not even apply for them. Provision is made in the Agrarian Code for nullifying all existing mortgages and other encumbrances on the property affected by expropriation for agrarian purposes, in proportion to the amount of the property expropriated. In other words, the amount of property left to the debtor after some of his land has been expropriated "shall only serve as a guaranty to the creditor for the proportionate amount of the tax value of such area in relation to the tax value of the entire property at the time the guaranty was executed" (Art. 70). Some persons hold the point of view that, since many of the haciendas were mortgaged almost to their full value and since the mortgage was waived for the property expropriated, the hacendados really suffered very little loss by expropriation, the actual loss being suffered by their creditors.

PROCEDURE FOR GRANTING LAND TO VILLAGES

The task of redistributing lands to villages, including the arrangement for the necessary expropriations, is the special function of the Federal Agrarian Department (Departamento Agrario), which has a central office in Mexico City and a local delegate in each state and territory. An important role is also played by state and territorial governors, especially in the early stages of initiating the grant. Final decision rests with the president of the Republic, whose verdict is handed down in the form of a presidential decree published in the *Diario oficial*. The proceedings are initiated by a petition to the state governor from the village requesting land. When the governor receives it, he orders it published and within ten days refers it to the Mixed Agrarian Commission. This commission in each state consists

of three members: the chairman, who is the delegate of the national Agrarian Department and who resides at the capital of the state or territory in question; the secretary, who is appointed by the governor of the state or territory; and the third member, who is the representative of the *cjidatarios* of the state and is chosen by the president of the Republic from a list of names submitted to him by the League of Agrarian Communities and Peasant Syndicates. Upon receipt of the petition for land, the Mixed Agrarian Commission proceeds to conduct an agrarian and livestock census to determine the number of eligible recipients of land living in the petitioning village, the amount of land that can be taken from private properties within the zone of seizure according to the Agrarian Code, and the general feasibility of forming an *ejido*. If it is found that at least twenty individuals eligible to receive land are living in the village and if sufficient suitable land can be found within the zone of seizure (a radius of 7 kilometers) without molesting the inalienable properties as specified in the Agrarian Code, it is likely that a recommendation favorable to the granting of the petition will be made. When the Mixed Agrarian Commission finishes the study of the petition, including the hearing of objections on the part of alienable property owners, a report is made to the governor on the feasibility of making the requested grant. Basing his action on the evidence submitted by the commission, the governor may pass favorably on the petition and actually make a temporary grant, pending final action by the president of the Republic, or he may decide the issue negatively. In either case his decision and the evidence on which it is based are referred to the national Agrarian Department and are reviewed by a Special Advisory Board (*Cuerpo Consultivo Agrario*), of which the head of the department in Mexico City is president. This board makes a recommendation to the president of the Republic, whose final decision, from which there is no appeal, is announced in the *Diario oficial*.

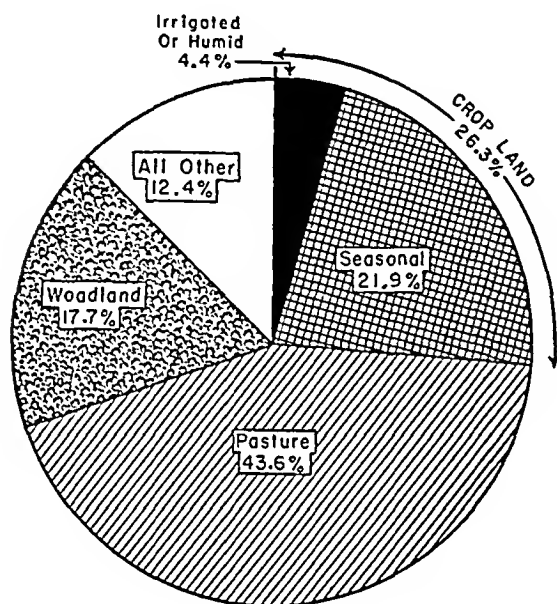
SIZE OF LAND GRANTS

Until 1943 the method of computing the size of the grants to be made was to allow crop land in the following proportion: (1) 4 hectares of irrigated or humid land for each eligible recipient. If sufficient irrigated land were not available, then: (2) 8 hectares of seasonal land should be allotted as the equivalent.

When the Agrarian Code was revised in 1943, these allotments were increased to 6 hectares of irrigated or humid land or 12 hectares

of seasonal land.⁶ The Agrarian Code allows for increasing these amounts when creating new settlements, when granting lands from the national domain to Indian tribes, or whenever there is sufficient land to grant the increase without injuring the rights of other petitioners for land.

In addition to the crop lands specified above, grants may include the following types: (1) pasture and woodlands sufficient to meet the requirements of the ejido; (2) land for the village site; and (3) a school plot for use of a rural school.



TYPES OF LAND
DISTRIBUTED TO
PEASANTS UNDER
THE AGRARIAN
PROGRAM
1915-1944

FIG. 17.—Land distributed to ejidos, 1915-44, classified according to type of land. Based on Appendix A, Table 14.

In case there is not enough crop land to accommodate the number of qualifying recipients, a selection is to be made, giving preference to individuals in the following order (each group excludes the succeeding one): (1) peasants over thirty-five years of age with a family to support; (2) peasant women with a family to support; (3) peasants of thirty-five years of age, or younger, with a family to support; (4) peasants over fifty years of age without a family to support; and (5) other peasants whose names appear in the census (Art. 85).

Within each of these groups, preference is given to the older persons and, other things being equal, to those having a longer term of residence in the village.

6. On February 12, 1947, Art. 27 of the Constitution was amended so as to increase the size of plots granted to ejidatarios in the future to at least 10 hectares of irrigated or humid land or 20 hectares of seasonal land.

TYPES OF LAND DISTRIBUTED

Slightly more than one-fourth of the total amount of land distributed prior to 1945 is classified as crop land (20.3 per cent), while nearly three-fourths (73.7 per cent) consists of other types of land, such as pasture, woodland, and mountains (Fig. 17 and Appen. A, Table 14). There is considerable variation in the types of land dis-

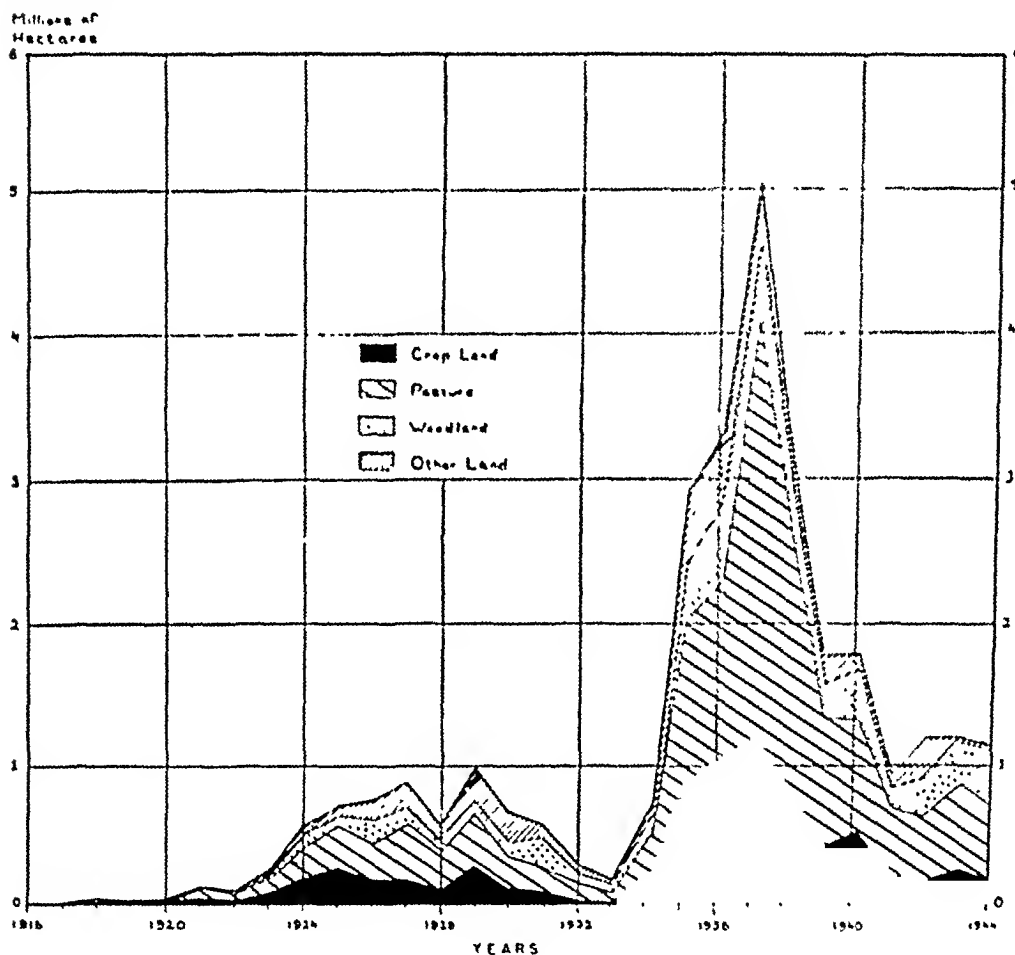


FIG. 18.—Variations in the amount of each type of land distributed to ejidos each year from 1916 to 1944. Data from Departamento Agrario.

tributed in the various regions. The highest proportion of crop land is found in the central region, where it reaches 44.9 per cent. The crop land in the Gulf region amounts to 30.8 per cent of the total area distributed, and in the south Pacific, 32.8 per cent. In the north Pacific region only 20.4 per cent of the land distributed is crop land, and in the north only 15.1 per cent. Variations in the amount of each type of land distributed for the country as a whole each year from 1915 to 1944 are given in Figure 18.

The average number of hectares of land received per person has tended to increase with the passing of time. In 1919 each person received only 2.5 hectares per person. In 1945 the recipients received 38.4 hectares per person. Most of the increase, however, has consisted of noncrop land. The average recipient in 1945 received 8.3 hectares of crop land and 30.0 hectares of noncrop land (Table 19).

The average size of the allotment for each person receiving land from 1915 to 1944 is given by states and regions in Table 20. It is smallest in the central area and largest in the north. The average number of hectares of all land distributed per person in the entire country is 17.5, but most of this is unsuitable for crops. The average recipient received only 4.6 hectares of crop land. This is much smaller than the average amount of crop land which is specified for distribution in the Agrarian Code. Taking into account the proportions of irrigated and seasonal land distributed and the specifications of each in the code, the average ejidatario should have received about 6.8 hectares.⁷ Thus the average ejidatario has received only 67.7 per cent (two-thirds) of the crop land to which he was entitled under the terms of the Agrarian Code. Glancing down the next to the last column of Table 19, we find that the average number of hectares of crop land granted per person was less than that prescribed for irrigated land for each of the sixteen years between 1917 and 1932. Since 1932 the size of the grants has been larger and, since 1937, appears to be fairly close to what might be expected in terms of the Agrarian Code.

RULES OF TENURE

From the time the presidential resolution is put into effect granting land to an ejido, the following rules prevail with respect to tenure:

1. The pasture lands and the woodlands shall always belong to the ejido collectively unless they are opened up for cultivation and are divided among the ejidatarios in the form of plots.
2. The right to use and utilize water for irrigation of the ejido lands shall belong to the ejido.

7. Until 1943, the Agrarian Code specified that each individual should receive at least 4 hectares of irrigated land or its equivalent. The equivalent in seasonal land was specified as 8 hectares, or two for one. Of the total crop land distributed from 1915 to 1943, 1,313,181 hectares consisted of irrigated land, and 6,420,772 hectares consisted of seasonal land. Assuming that the irrigated land was distributed in units of 4 hectares and the seasonal land in units of 8 hectares, the average size, including both types, would amount to 6.8 hectares.

TABLE 20
TOTAL AREA OF LAND DISTRIBUTED UNDER THE AGRARIAN PROGRAM AND AVERAGE SIZE OF ALLOTMENT, BY REGIONS AND STATES, 1915-44*

REGION AND STATE	TOTAL NO. OF HECTARES DISTRIBUTED	TOTAL NO. OF RECIPIENTS	AVERAGE NO. OF HECTARES RECEIVED PER RECIPIENT		
			Total	Crop Land	All Other
North Pacific.....	2,749,350	109,668	25.1	5.1	20.0
Baja California N....	370,016	5,055	62.1	5.0	56.2
Baja California S....	59,792	3,353	17.8	1.6	16.2
Nayarit.....	664,386	33,646	19.7	4.6	15.1
Sinaloa.....	834,853	42,549	19.6	6.0	13.6
Sonora.....	820,303	24,165	33.9	4.5	29.4
North.....	13,628,688	388,930	35.0	5.3	29.7
Coahuila.....	1,694,217	66,627	25.4	5.0	20.4
Chihuahua.....	3,071,392	40,989	61.4	5.7	55.7
Durango.....	2,373,802	63,521	37.4	5.0	32.4
Nuevo León.....	968,403	28,273	34.3	5.0	28.4
San Luis Potosí.....	2,725,133	84,808	32.1	4.8	27.3
Tamaulipas.....	937,488	34,228	27.4	6.0	21.4
Zacatecas.....	1,858,103	61,484	30.2	5.6	24.6
Central.....	7,192,503	813,526	8.8	4.0	4.8
Aguascalientes.....	229,339	14,686	15.6	6.3	9.3
Distrito Federal.....	26,779	18,359	1.5	0.9	0.6
Guanajuato.....	855,331	87,764	9.7	5.5	4.2
Hidalgo.....	606,984	64,459	9.4	3.1	6.3
Jalisco.....	1,318,062	124,325	10.6	5.4	5.2
México.....	783,629	161,802	4.8	2.3	2.5
Michoacán.....	1,571,113	130,725	12.0	4.8	7.2
Morelos.....	279,580	29,435	9.5	4.0	5.5
Puebla.....	956,428	118,043	8.0	3.3	4.7
Querétaro.....	396,973	27,521	14.4	5.3	9.1
Tlaxcala.....	168,285	35,507	4.7	3.4	1.3
Gulf.....	3,903,160	224,557	17.4	5.4	12.0
Campeche.....	422,331	19,038	22.2	4.4	17.8
Quintana Roo.....	1,086,249	2,995	362.7	0.6	362.1
Tabasco.....	475,464	31,352	15.2	8.0	7.2
Veracruz.....	984,331	115,109	8.6	5.5	3.1
Yucatán.....	934,785	56,063	16.7	4.2	12.5
South Pacific.....	2,546,651	179,788	14.2	4.7	9.5
Colima.....	142,739	8,380	17.0	6.1	10.9
Chiapas.....	676,277	54,939	12.3	4.9	7.4
Guerrero.....	1,005,234	61,487	16.3	4.1	12.2
Oaxaca.....	722,401	54,982	13.1	4.8	8.3
Total.....	30,020,352	1,716,469	17.5	4.6	12.9

* Data compiled from the records of the Departamento Agrario.

3. All ejidatarios are entitled to a house lot in the town site but must occupy and build on it. They may acquire full individual ownership rights after four years of continuous possession. Excess house lots may be rented, leased, or sold under certain conditions to people desiring to settle in the village.

4. The tillable lands may be farmed either collectively or individually. If collective farming is practiced, the ownership of the land rests with the ejido, and the individual is issued a certificate of agrarian rights which entitles him to share in the collective enterprise. This right may be passed on to his heir. If individual farming is agreed upon, the tillable land is divided into plots, with each ejidatario allotted one and given limited ownership over it. He may use this plot during his lifetime and may pass it on to an heir. The right of the ejidatario to participate in the collective enterprise when collective farming is practiced or to use the plot individually when the individual form of tenure is used cannot be alienated, or transferred to another. The land cannot be leased or mortgaged. The law concerning this reads as follows:

The rights to agrarian property acquired by centres of population shall be inalienable, imprescriptible, not subject to attachment and untransferable, and therefore, under no circumstances or in any manner, may they be alienated, ceded, transferred, leased, mortgaged or otherwise encumbered wholly or in part. Therefore any operations, acts or contracts already entered into, or which it may be sought in the future to enter into in violation of this precept shall automatically be null and void [Art. 138].

Although the agrarian rights could not be mortgaged or sold, until 1943 there were eight stipulated reasons for which ejidatarios could be deprived of their rights:

1. For mortgaging, transferring, or renting the property to others.
2. For failing to till the plot for two years in succession in cases in which individual allotments have been made or for not working in the collective enterprise for a period of two consecutive years in cases in which the ejido lands are worked co-operatively.
3. In case of marriage by a female ejidataria to a male who already holds a plot.
4. For mental derangement, alcoholic degeneration, or justified imprisonment for more than two years.
5. For failure to take possession of the awarded plot or to participate in the collective enterprise within three months after the grant.
6. For failure to pay taxes or to meet such obligations as might be contracted in a general assembly.

7. Whenever the rights of the ejidatario have been suspended on two occasions for justified reasons.

8. When the ejidatario commits acts against the community which cause disorganization, confusion, or lack of harmony (1941 code, Art. 139).

This imposing list of restrictions gave rise to numerous abuses and excuses for depriving the ejidatario of his newly acquired property rights. Local *políticos* quickly discovered that, by means of financial or other inducements, they could get co-operation from the local officers of the ejido and, through them, force support of their political schemes from the ejidatarios. They could do this by threatening to deprive them of their individual rights on the ground of "creating lack of harmony," "confusion," or "acts against the community." So frequently were the ejidatarios deprived of their lands by means of such excuses that widespread insecurity and unrest developed among them. They began to clamor for individual titles to their lands and freedom from the caprices of their own local leaders. As a result of these protests, the law was changed in the Agrarian Code of 1943 to read as follows:

Ejidatarios shall lose their rights to plots and, in general, all rights as members of a centre of communal population—except their rights to the house plots awarded them in the urbanized zone—on the sole and exclusive grounds furnished by failure to work their plots for two consecutive years or more, or for failure to do their part of the work if the holding is farmed on a collective basis [Art. 169].

Furthermore, it is stated in Article 173 of the new Agrarian Code that an ejidatario may lose his agrarian rights only by a decree issued by the president of the Republic after thorough investigation of the facts in the case by the Agrarian Department. Even when an ejidatario loses his agrarian rights, they will be allotted to his designated heir (Art. 170).⁸

Penalties of a lesser nature than losing the right to the land are imposed in the new code for certain offenses. "Loss of crops" is decreed for the following:

8. Actually, two of the other previous offenses (Nos. 3 and 5) are still listed in the new code, although a new interpretation is given to them. It is argued that when a female ejidataria marries a person already holding a plot, she loses her right to the plot, not as a penalty for marriage, but as a means of preventing the accumulation of plots in one family (Art. 171). The failure of a person to take possession of a plot for six months (instead of three months as stated in the code of 1940) after it is awarded, is also still listed as a justifiable reason for withdrawing the right to possess it (Art. 172).

1. For renting the plot to others, leasing it, working it on a share basis, or for hiring outside workers to till it, except under specified conditions. In such instances, the crops will automatically be allotted to the persons who actually did the work (Art. 166).

2. Only one land tax may be imposed on ejido property, but for failure to pay this tax the crops of the delinquent ejidatarios may be attached up to 25 per cent of the yearly production of the respective plots (Art. 196).

Two types of titles are given to ejido lands, depending upon whether they are worked collectively or individually. An ejidatario who works his land on an individual basis—this includes the vast majority (probably 95 per cent, see chap. ix)—receives a restricted deed giving him limited title to the specific plot of ground which was allotted to him. The restrictions in the deed are those mentioned above to the effect that the land may be passed on to his heir but may not be sold or mortgaged and must be worked by the ejidatario himself or by the members of his family.

The title given to the ejidatario who is a member of an ejido in which the lands are worked collectively consists merely of a certificate of agrarian rights. This does not allot to him a specific plot of ground; it entitles him only to share in the collective enterprise. This right may also be passed on to his heir.

DISCUSSION OF THE LAND-REDISTRIBUTION PROGRAM

Arguments as to whether or not Mexico chose the wisest course in the wholesale breaking-up of the large holdings will probably continue for generations. There are two general points of view, each of which lays claim to a great many adherents.

THE POINT OF VIEW OF THE HACENDADO

The hacendado quite understandably has intense and deep-seated convictions on the subject. He views the agrarian program as nothing short of a dual crime. In the first place, he considers expropriation of lands by government officials as wholesale robbery of that which rightfully belongs to others. In the second place, he views as an equally serious crime what he regards as the reckless and indiscriminate bestowing of this "stolen" property upon ignorant peons who have no appreciation of its value or any ability to utilize it for the benefit of themselves or society. He will often tell you sadly that he could forgive the government for the crime of stealing his land, if only it had been placed in the hands of people who could profit by it.

He asserts dogmatically that, as things stand now, neither he nor anyone else realizes any benefit from the property. His attitude is that the peon is lazy, irresponsible, ignorant, and incapable of ever developing the capacity for responsible proprietorship. He asserts that, as a result of giving the land to people who do not know how to use it, agricultural production has declined, a large proportion of the lands are idle, and the ejidatario is worse off than when he was a peon. Many hacendados have told the author in all seriousness that the program has proved to be a major disaster for Mexico and that if Cárdenas had set out deliberately to destroy the productivity and stability of the country he could not possibly have done a more thorough job of it than was accomplished through his agrarian program.

THE POINT OF VIEW OF THE LIBERALS

The liberals, on the other hand, point to the very attitude of the hacendado toward the peon as partial justification of the agrarian program. They contend that there was no hope of ever developing the initiative and capabilities of the peon as long he was in economic bondage to the hacendado, who regarded him as inherently inferior and incapable of assuming responsibility. They consider the ignorance and lack of initiative on the part of the peon not as inherent characteristics but as due to his lack of opportunity to develop his capabilities. They assert that as long as he was under the domination of the hacendado such development was precluded.

They admit that the agrarian program has involved drastic methods; moreover, they argue that any less drastic measures would have failed to break up the land monopoly that had characterized Mexico for generations. They admit that injustices may have been committed in carrying out certain aspects of the program, since this would be inevitable in any scheme which sought to reorganize the entire land-tenure system in such a short period of time; nevertheless, they contend that these injustices are inconsequential when compared with the injustice of tolerating a system of relationships which relegated most of the rural population to a condition of perpetual serfdom. They are of the opinion that whatever interruption in production has taken place is a temporary phenomenon and is chargeable to the legitimate cost of remaking the peon into a responsible citizen.

CRITICAL ANALYSIS OF THE PROGRAM

Without passing judgment, at this point, on the wisdom of the program as a whole, we turn now to an enumeration and discussion

of some of the most frequent criticisms of the land-redistribution program.

1. Lands were expropriated without any regard for the efficiency with which they were being farmed. It is true that a great many of the haciendas were operated very inefficiently by antiquated methods based almost entirely on the exploitation of labor; yet some of them, by 1930, had become specialized and efficiently organized on a commercial basis and were making use of modern machinery and techniques. While there was a definite tendency during the early phase of the program to confine expropriation to the less efficient haciendas or to the unused portions of the better ones, this discrimination disappeared entirely during the Cárdenas regime, so that efficiency in the use of the agricultural resources was no deterrent at all to expropriation proceedings.

Some will always believe that it would have been wiser policy, economically, to have left these few more efficient haciendas to their owners and to have insisted that a larger proportion of the benefits realized from them be passed on to the workers in the form of higher wages, better living conditions, and more efficient social services. The point of view of the government is (1) that the haciendas would probably have failed to comply with such requirements and (2) that, because the Revolution was fought and won on a platform of *Tierra y Libertad*, there was no alternative but to redistribute the land, even on the better haciendas.

2. In designating haciendas to be expropriated, no discrimination was made, based on methods by which the lands were acquired by the hacendado. As we have seen, many of the haciendas were secured through illegal means, through usurpation of village lands, or through political favors bestowed during the Díaz regime. On the other hand, some were acquired by honest effort and at considerable sacrifice on the part of the owners. The principal criterion established in the Agrarian Code for determining whether or not the property was subject to expropriation for dotation to villages was nearness to the petitioning village (within a radius of 7 kilometers). During the Cárdenas regime property acquired by the sweat of the brow was just as susceptible to expropriation for dotation as that secured through fraud.

Supporters of the program as carried out argue that any attempt to prove that haciendas had been acquired through illicit methods would have resulted in protracted periods of litigation and indefinite postponement of the program. The people were demanding fulfil-

ment of the promises of the Revolution, and it seemed inadvisable to delay longer.

3. During the Cárdenas regime land was expropriated and redistributed so rapidly that there was little time in which to ascertain or verify the liability of the property for expropriation. Although the Agrarian Code specifies definite exemptions, many instances in which the entire property was expropriated have been called to the attention of the author. In some cases it has been reported that a greater number of hectares of land were distributed from a given hacienda than were contained in its total area. This was because the program was carried out in such haste that time was not taken to measure the property adequately. When the expropriation program was at its height, the agrarians received such favorable consideration from the government in most disputes involving the hacendados that they came to consider the land as rightfully belonging to them, regardless of who possessed it at the time. Many instances have been reported wherein armed bands of agrarians trespassed on private property, frightened away the owners by force of arms, then claimed the property on grounds of desertion by the owners.⁹ On the other side of the picture, the hacendados sometimes tried to frighten away the ejidatarios from the land, even after it had been granted to them by presidential decree. Cases have been reported wherein the huts of the peons were burned to the ground in order to drive them away from the hacienda so that they would not be eligible to invoke the agrarian laws.

4. Small holdings consisting of not more than 100 hectares of irrigated land, or its equivalent, were specifically exempted from expropriation by law; yet instances have occurred wherein properties consisting of less than 100 hectares were expropriated. In some instances private holdings were expropriated even when they were smaller in size than the minimum specifications of the plot that was to be granted to ejidatarios (4 hectares). One such case is acknowledged in the *Diario oficial* of August 1, 1942, wherein are listed the names of thirty-nine persons to whom compensation was granted on that date for holdings unlawfully expropriated in 1939. None of these holdings exceeded 50 hectares. Twenty-four contained less than 10 hectares, and four contained less than 4 hectares. There probably have been many other cases wherein the small owners were not able to pursue litigation long enough to receive a favorable verdict. The

9. Desertion is set forth in the Agrarian Code as grounds for expropriating the entire property.

difficulty here has been that property owners affected by agrarian decisions have been officially and legally denied, by Article 27 of the Constitution, the right to resort to court injunctions (*amparo*). This had made it possible in many instances for agrarians to take possession of the land while the owner was trying to prove his right to retain it. Once in possession, the agrarians were hard to dislodge. Many small property owners lost their lands in this manner. In 1946 there were numerous complaints from small property owners in the states of Guanajuato and Tlaxcala to the effect that their lands were being illegally invaded and usurped by the agrarians. Similar complaints had been made previously in many other areas.

As previously noted, shortly after President Alemán took office in December, 1946, he persuaded Congress to adopt an amendment to Article 27 of the Constitution which reads: "The owners or possessors of agricultural or livestock holdings to which have been given, or in the future may be given, certificates of inalienability, may initiate injunction proceedings [*amparo*] against the deprivation or illegal agrarian affectation of their lands and waters" (see Appen. B, Sec. XIV). It is assumed that this amendment will prevent in the future some of the more obvious abuses against small property holders. To large landowners still have no recourse to the injunction.

5. In some cases local government officials took advantage of the program and used it as a means of securing personal gain for themselves. It is claimed by some that the principal benefits from the agrarian program went to the *políticos* rather than to the ejidatarios. That some politicians took advantage of the program to secure personal gain for themselves, there can be little doubt. This sometimes took the form of blackmailing the hacendados into paying substantial sums of money. A local official, for example, might send word to an hacendado that the government was considering expropriating his land. The hacendado would immediately appeal to him for immunity. The official might then tell him that perhaps he could arrange to have only the poorest land taken instead of the best or that perhaps he could persuade the government to take only a few hundred hectares instead of several thousand. Then would follow the question, in a roundabout manner and usually by a subordinate of the most interested party: "How much would it be worth to you to have it arranged so that you will not be seriously affected?" The hacendado was used to buying special privileges, and he tried to do so this time. Cases have been reported to the effect wherein hacendados paid monthly sums to local government officials for the pro-

pose of purchasing immunity; but in the end they lost their lands as well. For once, it appears that bribery was of little avail, and the hacendado was helpless. It proved to be a lucrative source of income for a few corrupt officials, although during the Cárdenas regime it rarely saved the lands from expropriation.

6. The program was carried out so rapidly that there was little time in which to investigate the eligibility of recipients. The Agrarian Code specifies that in order to receive lands there must be at least twenty eligible applicants in a petitioning village and that to be eligible these applicants must be residents of the village and workers in agriculture; yet instances have been reported wherein these requirements were not fulfilled. In some cases it is claimed that persons were imported from other areas in order to make up the minimum number of twenty applicants so that lands from a given hacienda might be expropriated. Cases have been reported in which some of the names appeared on several different application lists from as many different petitioning villages. Many nonfarm workers, including shoemakers, barbers, carpenters, and industrial laborers, managed to get their names on the agrarian lists.

7. Land was expropriated and redistributed so rapidly that time was not taken to determine adequately the boundaries either of the property remaining to the hacendado or of that distributed among the ejidatarios. In some cases grants overlapped one another. Very frequently the presidential decree merely granted so many hectares of this hacienda to that ejido or so many hectares from that hacienda to this ejido, without marking off these areas. This resulted in widespread boundary disputes, some of which became so intense as to result in homicides and occasionally in feuds which have endured for years. Killings have been reported as a result of the land program in almost every state in Mexico. Sometimes quarrels resulted between ejidos, each accusing the other of taking its land. More frequent were conflicts between ex-hacendados and ejidatarios. The government provided arms for many of the ejidatarios in order that they might not be intimidated by their former landlords and thereby lose the lands soon after having come into possession of them. The ejidatarios sometimes used these weapons effectively against supposed trespassers. In some areas a minor form of organized banditry developed, as in southern Sinaloa, where it was reported to the author by a local government official that some six or seven hundred ejidatarios (and probably an equal number of nonejidatarios) were killed with-

in a period of four years. The conflicts in this area seemed to arise from the nature of the holdings that were expropriated. Large tracts of land had been handed down from former owners to their descendants. The latter divided the lands informally, with each descendant's knowing which land belonged to him but without having had any change recorded on the official public records. Although the descendants claimed to be small property holders, the public records recorded the properties as large holdings. Government agents, without making thorough investigation, accepted the evidence from the records and proceeded with expropriation proceedings. The alleged owners, after protesting vigorously, fled to the hills and organized themselves into bands for the purpose of resisting the agrarian program. It is said that they took delight in assassinating agrarian leaders whenever opportunity developed. Ejidatarios found it necessary to follow the plow with their guns strapped on their backs. An employee of the Ejido Bank was shot in the arm while returning from collecting payments on loans made to the ejidos by the bank. Life became so unsafe in some localities that the ejidatarios deserted the ejidos and the lands were then reoccupied by the former alleged owners. A presidential decree was recently issued returning deserted ejido lands in this region to the former claimants. This case is admittedly an extreme one, but conflicts on a minor scale have been widespread.

8. No studies were made for different regions to indicate the number of hectares of the various types of land necessary to support a family; nor was any attempt made to organize regional areas into logical producing units or to adapt the size of holding to the type of crop to be produced. A blanket ruling was issued for most of the Republic, allowing 4 hectares of irrigated or humid land or 8 hectares of seasonal land for each recipient. While this amount seems sufficient in the tropical areas, it is far from adequate in the semiarid regions. Frequently, even these small amounts were not allowed. Politicians sometimes found it expedient to accommodate as many persons as possible. They therefore merely divided the available land by the number of applicants in order to determine the size of the plot. As a result of this procedure, the average size of the allotment of crop land per individual in some areas does not equal the minimum specifications of the Agrarian Code. In seven states the average size of the plot of crop land, including irrigated and seasonal

land, distributed per ejidatario is less than the 4 hectares of irrigated land specified in the Agrarian Code.¹⁰

9. In the process of altering the relations between the people and the land by breaking up the haciendas and organizing ejidos, many new villages or communities were established. This would have been an excellent opportunity for introducing innovations aimed at improving the existing patterns of village arrangement so as to promote the health, convenience, and comfort of the inhabitants. Wider streets might have been planned for these new settlements; detached dwellings might have been constructed; improved house arrangements might have been made, including the provision for windows, which are usually lacking in village homes, and the provision of flues to carry off kitchen smoke.¹¹ Some provision might have been made for the separation of farm animals from the dwelling. Simple blue-prints might have been drawn up for these new settlements which would have avoided many of the defects in housing that are now widespread in rural Mexico, and these might have served as examples to other communities. For the most part, the new communities grew up in hit-or-miss fashion, with little or no attention given to community planning except in isolated instances.

When questioned concerning the lack of planning throughout the entire agrarian program, partisans of the Revolution usually admit that serious errors were made and that gross injustices were sometimes committed. They hasten to add, however, that speed was a most necessary element in the redistribution of land and that, if the program had been delayed pending the drawing-up of elaborate technical plans, the land might never have been redistributed. They assert that during such a delay the hacendados would have marshaled their political and economic forces to prevent any such widespread program from being carried into effect. Hence they argue that it was necessary to act with haste while conditions were favorable to the success of the program, even though technical plans had not been worked out. This point of view is summarized by Silva Hérzog as follows:

As stated before land hunger was one of the causes which originated the Revolution. Upon the definite triumph of the latter, it was necessary to give land to the peasants, it was necessary to give it to them rapidly, without a definite plan, without a program, and subordinating the distribution more to the political

10. Departamento Agrario, *Memoria*, 1943-44 (Mexico City, 1944).

11. See chap. xii.

requirements of the moment than to what science would have counselled in such a complicated problem. It was not possible to wait any longer, it was not possible to carry out investigations or to conduct a careful, complete and detailed study before making the distribution. It was necessary to give lands and they were given hurriedly, because there was no other way. Of course grave errors were made, but to wait would have been an even more serious error. What was done, rightly or wrongly, is done, and the important thing now is to improve it, to adjust the ejidos to the economic needs of the country, to educate the peasant socially and politically, to improve and increase the extension of credit and perhaps, at least in some regions of the Republic, to rectify the size of the *parcela* enlarging it so that the peasant may obtain not only the indispensable to keep him alive, but also what he needs to live with *decorum* and be a positive and progressive factor in this grave historical moment.¹²

12. Jesús Silva Herzog, *La Revolución mexicana en crisis* (Mexico City, 1944), pp. 21, 22. Courtesy of Cuadernos Americanos.

CHAPTER VIII

Colonization and the Development of the Small Private Holding

IN ADDITION to the agrarian program there have been other movements in Mexico tending to promote the small landholding as opposed to the latifundia. Some of these date from the period of the Conquest; others have grown out of the Revolution and consist of colonization programs and the bringing of new lands under cultivation through the development of irrigation projects. The latter two movements have been promoted concurrently with the redistribution of land under the ejido program.

THE RISE OF THE SMALL PRIVATE HOLDING

The pre-Revolutionary struggle between the hacienda and the landholding village attracted so much attention that it tended to overshadow the development of a third type of land tenure, that of the small private holding. The latter has been in existence in varying proportions since the time of the Spanish Conquest. It will be recalled that most of the Spanish grants to conquistadors consisted either of large tribute districts, many of which later were converted into haciendas, or landholdings of sufficient size that with some expansion they, also, grew into large estates. Not all the grants were of these types, however; some were of small units of land known as *peonías*.¹ These grants were made to Spanish soldiers who had been farmers in Spain and who expressed a willingness to become colonists in the New World. Most of them took Indian women as wives and settled down to till the soil with their own hands. Their children became mestizos, and their landholdings became the forerunners of what is commonly known in Mexico as the "rancho." The term "rancho" has a variable meaning, but, with reference to the size of holding, it refers to a small private landholding that is worked by the

1. G. M. McBride, *The Land Systems of Mexico* (New York, 1923), p. 88.

owner himself with the assistance of his immediate family or with the aid of a limited number of hired workers.² As McBride says:

In contrast with the *hacendado* the owner of a rancho [*ranchero*] is a real agriculturist. He lives on the land, works it himself, and depends for his living upon the crops which he cultivates. . . . He is thus the agriculturist of the country in a far truer sense than the *hacendado*, whose chief interest, as we have seen, is an assured revenue and the prestige which he may derive from possession of an estate and who, as a rule, lives upon his farm only a few weeks or days each year.³

While many of the ranchos in existence at the outbreak of the Revolution in 1910 owed their origin to the original grants known as *peonías*, others came into existence in various other ways. Some resulted from the Reform Laws instituted by Benito Juárez and his associates. These laws were enacted with the aim of creating a large body of independent proprietors by breaking up all lands held by religious or civil bodies that were not devoted to public use. The laws were interpreted as applying to the landholding villages, and many of these were broken up and divided among the individual members of the community. Thus private holdings were increased at the expense of both the church and the landholding village. As indicated in chapter iv, forces were operating which tended to absorb many of these smaller holdings into large ones almost as rapidly as they were created. The Indians were accustomed to collective ownership and did not understand the responsibilities or the value of individual ownership; hence many of them lost their lands almost as soon as they had received them. Sometimes these lands were absorbed into neighboring haciendas while the owners continued to till them as peons. On other occasions the more shrewd of the small holders bargained their fellows out of land and created new haciendas out of a collection of small holdings.

Benito Juárez also tried to develop small holdings by means of legislation introduced in 1863. This law was patterned somewhat after the United States Homestead Law of 1862.⁴ It permitted anyone to file claim to unclaimed public lands, on condition that the applicant settle on the land and maintain occupancy there for at least ten years. The amount of land claimed in this manner could not exceed

2. For its meaning with reference to a locality group see chap. ii.

3. McBride, *op. cit.*, p. 84. Reprinted by permission of the American Geographical Society.

4. *Ibid.*, p. 94.

2,500 hectares. These restrictions were later removed, and much of the available public land was concentrated into large estates; few small holdings were created.

In spite of the tendency for small holdings to become absorbed into large ones, some progress was made in the development of the small holdings. McBride summarizes the results of the Reform Laws as related to the increase of small holdings as follows:

Summing up the results of the agrarian reform instituted by Juárez and his associates, so far as the creation of small properties is concerned we find that, up to 1906, there had been distributed to individual holders 19,906 lots of what had been communal holdings and that 8,010 new properties had been formed from the public lands, making a total of 27,916 newly created holdings, most of which were ranchos. To this number we may add 357 grants to *labradores pobres* (poor laborers) in different parts of the public domain and 832 titles granted to colonists, bringing the number of recently formed, small, individual properties up to about 29,000 or almost double the number of ranchos existing in the entire republic in 1854.⁵

By the time of the outbreak of the Revolution in 1910, there were reported to be 47,939 ranchos in Mexico as compared with 8,245 haciendas. Thus, numerically, there were nearly six times as many ranchos as haciendas, but the small size of the ranchos made their total area relatively insignificant in comparison to the large areas controlled by the haciendas.

The revolutionary program has resulted in augmenting the number of small private holdings. This has been brought about through at least three developments: (1) Many of the former haciendas have been whittled down by the agrarian program until only the core of the hacienda remains to the hacendado. This consists of the buildings and about 100–150 hectares of irrigated land or its equivalent. It has been reduced to what the Mexicans refer to as a *pequeña propiedad* or “small property.” (2) Some of the hacendados foresaw the handwriting on the wall, so to speak, and voluntarily divided their estates into numerous small units, which were sold to small private owners in order to avoid government confiscation of the property. (3) Concurrently with the ejido program, the government has carried on minor colonization programs.

COLONIZATION

Mexico has witnessed colonization programs of one kind or another at various times during her history. In the years immediately

5. *Ibid.*, p. 96. Reprinted by permission of the American Geographical Society.

following the War of Independence, several attempts were made to colonize some of the more remote regions of the Republic. In 1823 a new province was created out of the isthmus of Tehuantepec, whereupon soldiers of the patriot army were offered opportunities to become farmers. Common soldiers were entitled to receive holdings of about 10 acres, and officers received larger grants according to their rank. In 1824, legislation was enacted with the purpose of promoting settlement in the sparsely populated northern areas of the Republic. Grants in these areas were large in size, owing to the semiarid nature of the lands. The only restriction as to size of holding was to the effect that no one person should receive more than 1 square league (9 square miles) of irrigable land, 4 square leagues of seasonal land, and 6 square leagues of pasture land.⁶ The Mexicans were slow to respond to the colonization scheme, but, since foreigners were also invited to participate, North American colonists took advantage of the opportunity and entered northern Mexico in large numbers. The colonization of these northern areas by foreigners was to prove a bitter lesson to Mexico when unrest developed and Texas seceded from the nation and later joined the United States.

FOREIGN AGRICULTURAL COLONIES

Colonization by foreigners has had little success from the viewpoint of the Mexicans. In most cases the levels of living of the native peasants have been considerably lower than those of the colonizing foreigners, and the latter have either migrated to the cities to engage in more lucrative occupations or have turned individualistic and have carved out large holdings for themselves. The most permanent and successful foreign colonists have been closely knit religious groups who have been fully as interested in perpetuating their religious culture and beliefs as they have been in making a living. Three such groups persist in Mexico today—the Mormons, the Mennonites, and the Russian Molokange.

The Mormon colonies.—Mormon colonization took place in northern Mexico from 1885 to 1900. Nine colonies were established, of which seven were located in northwestern Chihuahua and two in northern Sonora.⁷

The Chihuahua colonies were located in the vicinity of Casas Grandes. Six of them were situated either in the Casas Grandes River

6. *Ibid.*, p. 91.

7. Thomas C. Romney, *The Mormon Colonies in Mexico* (Salt Lake City, 1938).

Valley or in the valley of its tributary, the Río Verde. The three largest Chihuahua colonies—Colonia Díaz, Colonia Dublán, and Colonia Juárez—were located in what is generally referred to as the "Northern Plateau" or Mesa at an altitude of about 5,000 feet above sea level. Soon after settling these colonies, the Mormons constructed dams in the rivers and dug canals by means of which their farm lands could be irrigated. Colonia Juárez was developed into one of the most efficient fruit-producing areas in all Mexico. Colonias Dublán and Díaz became important centers for the production of small grains, alfalfa, and dairy products. The other four Chihuahua colonies—Cave Valley, Colonia Pacheco, Colonia García, and Colonia Chuichupa—were located in the heart of the western Sierra Madres, southwest of Casas Grandes, at elevations varying from 6,000 to 8,000 feet. These colonies were located in areas where there were virgin pine and oak forests, and lumbering has constituted one of the colonists' principal occupations. Heavy spring and fall frosts in these mountain colonies have restricted the crops to corn, potatoes, oats, and a few others; but the river valleys and slopes have been useful as grazing lands and have facilitated the production of beef cattle as an important agricultural enterprise.

The two colonies in Sonora were named Colonia Oaxaca and Colonia Morelos. They were located on the Bavispe River, an important tributary of the Yaqui River, which flows into the Gulf of California south of the seaport of Guaymas. These colonies were situated in a narrow river valley about fifty and seventy-five miles south of Douglas, Arizona. Within a few years after its establishment in 1892, Colonia Oaxaca was almost completely destroyed by a flood and was never resettled. Colonia Morelos was abandoned, as were other colonies during the Revolution, and it, also, was never resettled. Its lands were sold to the Mexican government in 1921.

The Mormon lands were acquired by means of outright purchase through a colonization company organized for this purpose—the Mexican Colonization and Agricultural Company. At first, the lands were held in common, with the idea that permanent ownership would rest with the company and the lands would be leased to private individuals. Within a few years, however, individual ownership was permitted and soon became the prevailing type of tenure. During the initial phases of colonization the company exercised firm control and permitted only members of the church "in good standing" to acquire lands in the colonies and even reserved the right to expel persons previously admitted whose conduct proved to be con-

trary to the rules laid down by the company. Romney describes this procedure as follows:

To obtain the use of any of this property one must furnish a recommend from the bishop of his ward certifying that he was honest and honorable and in full standing in the Church of Jesus Christ of Latter-day Saints. So long as the holder of the land observed the rules laid down by the company he could remain in possession of it, but should he prove recreant in any respect he was liable to a forfeiture of his stewardship. In case he were dispossessed of his holdings an arbitration committee would place a price upon the improvements he had made and he would receive due compensation for the same. It will thus be seen that the early Mormon colonists in Mexico held property under the same restrictions as did the early settlers of the Great Basin. In both cases only the devotees of the Mormon Church in full standing were entitled to possession and in both instances possession merely implied a stewardship—the titles being held by the Church while the tiller of the soil held his concession only during good behavior. The purpose of such a policy was to insure against the influx of non-members of the Church and other undesirables into a community whose aim was to control absolutely its social and religious life, and not for the purpose of materially enhancing the coffers of the Church. Indeed, investments in lands in Mexico by the Church subtracted from rather than added to its revenues. In the course of a few years the economic policy of stewardship was supplanted by individual ownership.⁸

The pattern of settlement in these colonies followed closely that of the Mormons in Utah. The farm village was the characteristic type, with the families clustered in villages and the farm lands located beyond the clustered settlements.⁹ The village was laid out in blocks or rectangles, with each family possessing about 1½ acres as a home lot. On one side of this lot was constructed the family dwelling, and on another side were built the barns, corrals, chicken coops, and other buildings to care for the farm animals. The lot also provided ample space for a family vegetable garden and a few fruit trees. In this type of settlement the farmer travels back and forth to work his main farm lands, which are located at some distance from the village.

The Mormon colonies were flourishing and in prosperous condition at the outbreak of the Revolution in 1910. In 1912, for reasons of safety, their local church officials ordered the colonists to abandon their homes and flee to the United States. For a period of about two years the colonies were almost completely abandoned. Many colonists sought homes in the United States and never returned; others began

8. *Ibid.*, p. 63. Reprinted by permission of the Deseret Book Company.

9. For a plan of the Mormon village settlement in Utah, see Lowry Nelson, *A Social Survey of Escalante, Utah* ("Brigham Young University Studies," No. 1 [Provo, Utah, 1925]).

to trickle back and to reconstruct their properties, which had been severely damaged during their absence.

Prior to the "exodus" the colonies were homogeneous communities, consisting almost entirely of Mormons from the United States and their descendants, with practically no Mexicans interspersed among them. Since that time Mormons who have deemed it inadvisable to return have sold properties indiscriminately, and now Mexicans and North American Mormons are interspersed in the same villages.

A comparison of the Mormon membership of the colonies which still survive is given in Table 21 for the years 1912 and 1946. In 1912

TABLE 21
APPROXIMATE MEMBERSHIP IN MORMON COLONIES IN
MEXICO IN 1912 AND IN 1946*

Name of Colony	No. of Members (1912)	No. of Members (1946)	Percentage 1946 Mem- bership Is of 1912
Dublán.....	1,200	250	20.8
Juárez.....	600	300	50.0
Pacheco.....	300	90	30.0
García.....	250	40	16.0
Chuichupa.....	300	130	43.3
Total.....	2,650	810	30.5

* These include only the colonies which Mormons were occupying in 1946. All are in northwestern Chihuahua.

there were about 2,650 members in the colonies; in 1946 there were only 810. This means that the membership is now less than one-third of what it was in 1912. Colonia Juárez is the only colony that has half of the 1912 membership.

These colonies are looked upon favorably by officials of the Mexican government, who tend to regard them somewhat as demonstration projects. The colonists have become efficient, independent small farmers, and they utilize farming techniques and practices that are far superior to those used by the surrounding Mexican peasant population. Agricultural products from the colonies may be found on sale in Mexico City and in other large cities of Mexico. This is especially true of dairy products and deciduous fruits. The standards of living of the colonists are on a much higher plane than those of the native peasants. Their houses are well constructed and conveniently arranged. They have developed good schools, and illiteracy is practically un-

known among them. The colonies maintain a modern and well-equipped high school, and some of their children, after finishing the high-school course, go to the United States to attend colleges and universities, many of them never to return. A few finish their training at the University of Mexico in Mexico City. About seventy youths have left the colonies during the last ten years to attend colleges and universities.

Their favorable characteristics notwithstanding, Mexicans feel some concern over the fact that these colonies do not assimilate into Mexican life. Their social institutions, culture, attitudes, and aspirations are all closely identified with those in the United States, and they tend to form little cultural islands living apart from the main stream of Mexican institutions and culture. About sixty-five boys left the colonies to serve with the armed forces of the United States in World War II. It is true that some of the colonists have become Mexican citizens; but even they do not intermarry with the Mexicans—not even with Mexican converts to Mormonism;¹⁰ they marry within their own local groups or go to the United States to find mates. The population of the colonies is so small at the present time that these customs probably do not present serious difficulties. Were their numbers to increase greatly, however, the problem of assimilation might become a serious one for Mexico.

The Mennonite colonies.—There are several Mennonite colonies in Mexico which contain a combined population of about 14,000 inhabitants. Most of these (10,000 inhabitants) are located in two adjacent colonies in the San Antonio Valley in the state of Chihuahua near the city of Cuauhtémoc, about seventy-five miles west of Chihuahua City. Another, known as the "Hague Colony," is located in the vicinity of Patos, Durango, and contains about 2,100 inhabitants, who are settled on some 20,000 hectares of land. A fourth colony containing about 600 inhabitants is located in the vicinity of Santa Clara, Chihuahua, not far from the San Antonio Valley. Early in 1944 a group of about 200 Mennonites moved from the San Antonio Valley to settle near the city of Saltillo in the state of Nuevo León. In addition to these groups there are a few families in the state of San Luis Potosí about 130 miles west of the city of Tampico.

Each colony consists of a number of small farm villages, each containing from ten to forty families. The number of villages in each

10. The Mormon Church maintains a Mexican mission with headquarters in Mexico City. During the last ten years about 100 youths from the colonies have served as missionaries for a period of about two years each, with their families paying all expenses.

colony and the approximate number of inhabitants are shown in the accompanying tabulation.

Name of Colony*	Location	No. of Villages	No. of Inhabitants
Manitoba.....	San Antonio Valley, Chihuahua	43	7,225
Swift Current.....	San Antonio Valley, Chihuahua	16	2,122
Hague.....	Patos, Durango	16	2,151
Sommerfelder.....	Santa Clara, Chihuahua	6	600
New Manitoba.....	Nuevo León	4	200

* Data computed from J. Winfield Fretz, *Mennonite Colonization in Mexico* (Akron, Pa., 1945).

The present discussion will be concerned with the colonies in the San Antonio Valley near Cuauhtémoc, Chihuahua, to which the author made a personal visit in the latter part of 1942.

The Mennonites in the larger colony came from the southern part of the Province of Manitoba, Canada, and gave the name "Manitoba" to their colony. Those from the smaller colony came from Swift Current in the Province of Saskatchewan, Canada, and likewise named the colony after their Canadian home. Both groups had previously migrated to Canada from Russia; prior to that they had lived in Germany. All the colonists speak a German dialect; few speak any other language. They left Canada because they did not want to send their children to the public schools. Following World War I, Canada decided to nationalize all its immigrant groups except the French. Schools were required to be conducted in the English language, though previously each ethnic group had been free to conduct them in its native tongue. The Mennonites regarded this decree as depriving them of freedom of education, which, to them, was equivalent to surrendering freedom of religion.¹¹ They secured from the Mexican government a presidential decree exempting them from military service and from the necessity of sending their children to the public schools. They were permitted to maintain their own private schools, to conduct them in the German language, and to teach religion in their own way.

They formed a colonization company and purchased 83,000 hectares of land near Cuauhtémoc from a large hacienda at a price of nine dollars (United States currency) per hectare. The land was all unimproved grazing land, and the colonists now feel that they paid much too high a price for it. They came to Mexico from Canada by train. There were at least thirty-five train loads, each containing about

11. J. Winfield Fretz, *Mennonite Colonization in Mexico* (Akron, Pa., 1945), p. 11.

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governmental authority to settle disputes. The Mennonites of this area seem to be a completely autonomous unit. They are not connected with any central organization; they are the ultimate source of authority for themselves. They mete out their own punishments to delinquents. Sometimes punishments may consist of fines; at other times public apologies to the church membership are required. The bishop is the main authority over the colony, and next in authority are the preachers. There are eleven preachers in the Manitoba Colony for a population of 7,225.

Two civil chiefs (*Oberschulzen*) are elected for the entire colony by majority vote of the inhabitants, and they serve for a period of two years, although they may be re-elected. There is also one local chief (*Schulze*) for each village. The main function of these chiefs is to stand between the government and the camps by paying the colony taxes and looking after the general welfare. They also attempt to settle local disputes, but if they fail the disputes are referred to the bishop, who seeks an answer in the Bible. He may call in the preachers to help decide. If there is objection to the decision, he may call together the male members of the church in order to convince them of the wisdom of the decision. Discipline is exercised very effectively by means of the threat of ostracism or excommunication.¹² The preachers are workingmen like anybody else, and they receive no pay for their ecclesiastical services.

There is no irrigation in this area, and crops can be grown only during the rainy season. The colonists specialize in growing oats and in dairy products. They utilize modern farming methods, including farm machinery such as power threshing machines, binders, tractors, and mowing machines. They have good breeds of dairy cattle and keep good work stock.

These Mennonites belong to a branch known as "Old Colony Mennonites." They believe in adhering tenaciously to the customs, traditions, and beliefs that were practiced by their ancestors. They have strong taboos against articles which might be considered as luxuries because they regard the use of luxuries as sinful and immoral. They are forbidden to have automobiles or trucks, but they purchase old cars and utilize the chassis for the purpose of making horse-drawn vehicles with rubber tires. Old-fashioned buggies are also in great demand. It is quaintly picturesque to see, on a Sunday afternoon, the roads lined with the old horse-and-buggy combinations, driven by

12. *Ibid.*, p. 24.

families in old-fashioned dress, going from one village to another to visit relatives and friends.

Houses are small and uniform in structure. They are of a simple, one-story box type made, usually, of adobe. Sometimes four or five persons are crowded into a single room. The houses have adequate window space. Most of them have only sand or clay floors, although a few have wood or tile. The barns are often attached to the houses. Although the stables are kept clean and the kitchens are usually detached from the main house, the close proximity of the barns make flies a serious problem. Few of the houses have running water, and none have bathrooms. Such items as rugs, refrigerators, and electrical appliances are regarded as luxuries and are not used.

There are neither physicians nor nurses in the colonies, and there is considerable lack of modern sanitation. Men do not hesitate to spit on the floor, for example. Much illness probably could be prevented through the practicing of a few elementary rules of health.

Dress is rather rigidly prescribed. Men usually wear overalls and a sweater or jumper. They must not wear ties or white collars. They must shave only once a week. Women, including young girls, wear long, full dresses extending to the ankles. They also wear aprons. Until marriage, girls wear a bib over the apron; after marriage the bib is removed. Many of the women and some of the men go barefoot.

In general, it would appear that the Mennonites have very little education except for the practical sort which they acquire from experience in the daily tasks of life. Children start to school at about the age of six years and attend until about the age of ten or twelve. They are taught a few of the fundamentals of reading, writing, and arithmetic—all in their own German dialect—but the main emphasis is on the Bible and religious teachings. Mennonites do not teach their children Spanish. They do not want them to associate with Mexican children or to become Mexican citizens. Each village builds its own schoolhouse and raises the revenue with which to pay the schoolteacher. There are practically no books or magazines in the homes, with the exception of those of a religious character. Women and girls work in the fields with the men and perform such chores as milking cows and taking care of the poultry, in addition to their household duties. Families often exchange work; consequently, very few hired laborers are employed.

The Mexicans tend to regard the Mennonites as industrious and

efficient farmers who have brought a large area of comparatively unproductive land into effective production. As with the Mormon colonies, the Mennonite colonies are viewed somewhat as demonstration projects which serve to show the Mexican peasants in this area what can be accomplished when conscientious effort is combined with efficient farming techniques. Certainly, the colonists appear to be much more prosperous than the Mexican peasants in this vicinity.

To an even greater extent than do the Mormons, however, the Mennonites constitute a cultural island which participates little in the life of the nation. The birth rate is very high among them, and they are now looking for new lands to colonize. They want to secure a large tract so that another group of villages can be established that will form a self-sufficient social and economic unit. As small groups, their industriousness and efficient farming techniques probably offer a positive contribution to Mexican agriculture and are worthy of emulation; nevertheless, if their settlements expand very much, the problem of assimilating them into the national life will be even more serious than in the case of the Mormons.

*The Russian colony of Lower California.*¹³—This colony was established in 1905 and is located in the Guadalupe Valley near Ensenada, in the northwestern part of Lower California. The settlers consisted of about one hundred Russian families, who came originally from the vicinity of Kars in southern Russia, although by a rather circuitous route. Some of them went first to Canada, then to the United States, and, finally, to Mexico. The lands for the colony settlement were acquired by purchase and consisted of 13,000 acres, which formerly constituted a ranch known as the "Ex-Mission Guadalupe." About 6,000 acres were arable, and the purchase price was 50,000 American dollars. The lands were purchased jointly by the colonists, who jointly contributed \$5,000 as a down payment and gave a mortgage on the balance. From that time forward, each farmer contributed half his yearly crop toward payment of the debt until the mortgage was completely liquidated.¹⁴

The colonists settled in a line-village pattern, with houses, barns, and farmyards fronting on either side of a broad street. The farm lands were located away from the village, and settlers travel consider-

13. Information concerning this colony is taken from Oscar Schmieder, *The Russian Colony of Guadalupe Valley* ("Lower Californian Studies," Vol. II, No. 14 [Berkeley, Calif., 1928]).

14. *Ibid.*, p. 416.

able distances to carry on the farm work. In some instances the fields are so far away that the men folk find it advisable during certain seasons of the year to camp out on their lands in tents for weeks at a time.¹⁵

The colony emphasizes collectivism in many aspects of village life. The land is considered as belonging to the group rather than to the individual, even though each family has its separate plots. The land-tenure system is described by Schmieder as follows:

The land was divided into small lots and these were distributed among the different families. The fields which each family received were not contiguous; the leading viewpoint being that each family ought to have an equal amount of good and bad land. No colonist received an individual title to his land. His rights were based on simple mutual agreement. Even the individual usufruct of the arable land is restricted. After the gathering of the harvest all fields become common pasture. From April until December the whole extent of the colony is considered parish property and every part of it is open to the grazing stock of any colonist. When a family retired from the colony, it sold or rented its field to one or several colonists, leaving to the community a document in which they resigned their rights as members of the colony.

Simplification of tax collection by making the village Elder (*Starosta*) responsible for the totality of the taxpayers had been, indeed, one of the main reasons why parish property has been introduced and continued in Russia. In Mexico the authorities did not favor the system. Yet the subornness of the colonists has, up to now, not yielded to any pressure.¹⁶

Many aspects of Russian culture have been preserved, including village arrangement, house structure, religious organization, women's dress, and methods of farming. They do not profess the Greek Orthodox religion but are sectarians of the Molokange variety. Concerning the preservation of their religious culture, Schmieder says:

They condemn image worship, fasting, episcopacy, and accept the Bible as the only rule of faith. Their religious services are held in private houses, the pastor being an uneducated peasant like the others. They refuse military service. Birth, marriage, and death are considered family affairs, no interference of public authorities being tolerated. They maintain these religious prescriptions up to now, in spite of the fact that they have frequently annoying consequences; e.g., when a young "Russian" born on Mexican territory desires to enter the United States as Mexican non quota emigrant, and is not eligible for admission, since his birth has never been registered.¹⁷

Farming methods are described by Schmieder as generally backward, with fairly large extensions of land used but with little attention paid to conservation of soil fertility. In addition to farming their

15. *Ibid.*, p. 417.

16. *Ibid.*, pp. 416, 417.

17. *Ibid.*, p. 414, n. 5.

own lands, they rent land from neighboring Mexicans, who ordinarily use it mostly for livestock production.

It is this fact alone, that arable land for rent is easily obtainable in the neighborhood, that has made it possible for them still to carry on their agriculture in the old primitive way. Restricted to the land which they own, they would long ago have exhausted the soil. Their ploughs overturn only the barest surface of the soil, and hardly remove the weeds. No kind of fertilizer is used, save the manure of cattle and horses, which is spread over the stubble fields when used for pasturage. This gives the only advantage they have over south Russian conditions, where the manure is burned, for lack of other fuel. Rotation of crops is absolutely unknown. For over twenty years wheat has been their only market crop. Only when completely exhausted, is the soil left to fallow for a year or two.¹⁸

The material culture of the Russian colony is being influenced considerably by the United States. It is reported that the young people frequently cross the border to work and often stay there to live. For this reason, the population of the colony is not increasing rapidly despite the existence of a high fertility rate. Its influence on Mexico is confined largely to the Guadalupe Valley.¹⁹

The Spanish refugee colony.—The most recent attempt at colonization in Mexico by foreigners was that of the Spanish refugees, who purchased a large ranch for this purpose in 1939. The area included about 150,000 hectares located in the Santa Clara Valley, in the state of Chihuahua, northwest of Chihuahua City. The land is located at an altitude of over 7,000 feet above sea level and had been used previously as grazing land only. The Spanish refugees devised a grandiose scheme for colonizing it, and early in 1940 about 450 colonists moved in. The land was purchased by funds made available through a central committee of the Spanish refugee government residing in Mexico City. This committee also provided funds for the construction of homes, the building of irrigation dams, the purchase of farm machinery, the purchase of cattle and other livestock, and the construction of a road connecting Santa Clara with the highway running from Chihuahua City to Ciudad Juárez.

The project was organized so that each individual would work at a wage commensurate with his abilities on whatever tasks were to be done. The colony was considered a co-operative project, which would be financed by funds available to the central committee until such time as the land could be brought into production and reimburse-

18. *Ibid.*, p. 420.

19. *Ibid.*, p. 422.

dissension broke out among them. This tended to interfere with efficient management of the enterprise.

3. Some became convinced that the soil was not so adaptable to the growing of crops as had been originally assumed.

4. Finally, the central committee appeared to feel that the project was consuming more funds than were justifiable in view of the possibilities for repayment, and they gradually withdrew from the financing of the project.

As a result, the colonists became discouraged and most of them left. They are now located in the larger cities of Mexico and are finding their places among the various urban occupations to which they have long been accustomed.

These four groups of foreign colonies are too small to exert much influence on the total rural economy of the nation. The principal value to Mexican agriculture of the Mormon and the Mennonite colonies is that they serve as demonstrations of more efficient farming techniques than those employed by the surrounding native population and as methods of effectively utilizing small landholdings. It should be noted that all these foreign colonies are situated in northern Mexico. It probably would be of value to have a few such colonies located in the southern parts of the Republic also, where farming techniques are more primitive than those in the northern states. The native population would then have more to learn from such projects.

AMOUNT OF LAND COLONIZED FROM 1916 TO 1943

In one of the divisions of the Secretariat of Agriculture there is a Department of Colonization. This department has official charge of the government's colonizing program. Unfortunately, the term "colonization" is used rather loosely in this department and does not necessarily refer to the establishment of new agricultural communities. A group of former renters, for example, may petition the Department of Colonization to assist them in purchasing the lands they have been renting; if the government approves and extends them credit, the project may be called a "colony" even though no change is made in the use of the land or in the residence of the farm operators. On the other hand, lands are settled through other agencies of the government, such as the Commission of Irrigation, without being labeled colonies. Hence the data presented below are not complete and should be interpreted merely as representing the types of programs that are being carried on with the objective of promoting small landholdings.

According to Mexican law there are three types of land that may be colonized:

1. Lands belonging to the nation and those which the nation may acquire through application of the Federal Irrigation Law
2. Lands acquired for that purpose by the National Bank of Agricultural Credit
3. Private lands under the terms specified in this law²⁰

Colonization of the first two types of land would ordinarily be initiated by direct action of the federal government through the National Bank of Agricultural Credit or through the efforts of colonization companies authorized for this purpose. Colonization of private lands may be initiated either by private landholders wishing to subdivide and sell their properties or through government action when lands of the first two types are not sufficient to meet the needs for a given colonization project. In the latter case, private lands may be expropriated for colonization purposes, with the following exceptions:

- a) Properties which are being adequately farmed
- b) Properties which constitute an agricultural-industrial unit planned and carried out in accordance with modern technology
- c) Properties in which direct administration is employed in more than 50 per cent of the lands used for each type of enterprise²¹

Colonists are expected to pay for the lands they receive and must produce evidence to the effect that they have funds with which to begin their first year's farming operations or that they have the necessary credit. In cases in which private land is expropriated for purposes of colonization, the former owner receives payment in the form of regular instalments from the colonists until the lands are paid for at the price fixed at the time of the expropriation proceedings.

In the selection of colonists for any given project, preference is given to persons in the following order:

1. Sharecroppers and renters who are working the land at the time the project is initiated
2. Farmers living in the vicinity
3. Expatriated farmers who wish to return to the country
4. Farmers in general
5. Nonfarmers.²²

20. *Ley federal de colonización, su reglamento, decretos y acuerdos relativos a colonización* (Mexico, 1943), p. 5.

21. *Ibid.*, p. 6.

22. *Ibid.*, p. 8.

In order to qualify as colonists, persons must also be able to meet certain other requirements:

a) In order to be a preferred colonist, one must show proof of being a farmer with experience in agricultural work, of age, in good health, and of good conduct.

In the case of foreigners, the evidence must be satisfactory to the consul who visés the passports.

b) One must have sufficient resources to finance the first crop year or have credit to obtain such resources.

Foreign colonists must deposit with the National Bank of Agricultural Credit the amount of \$1,000 (Mexican Currency) per family. They may dispose of this amount for the expenses of cultivation and maintenance of the family from the time the work is begun.

c) One must promise to pay 5 per cent of the value of the land at the time the first crop is harvested and the balance in yearly instalments, in accordance with the regulations.

The lack of payment of the instalments gives the right to extend the maturity date for one year, provided that it is due to crop failures through causes not attributable to the colonist. In any other case, lack of payment of two instalments will be sufficient cause for cancellation of the contract and seizure of the land by the administration of the colony, which will then turn it over to a new colonist, returning to the previous colonist 80 per cent of what he may have paid. The remaining 20 per cent, as well as any increase in the value of the land, will be for the benefit of the colony, in accordance with the regulations.

d) One must promise to pay from the first year's crop the dues for the general expenses of the colony, to work the land directly or to direct the work, and to fulfil the regulations approved for each colony by the Secretariat of Agriculture and Development.²³

In 1941 a law was enacted permitting retired personnel from the armed forces of the nation to settle in colonies on the three types of land previously described. In such cases the lands are an outright gift by the government. They are placed in workable condition. Houses and roads are constructed at government expense and at no cost to the colonists. The size of the plot which each receives is based upon his rank in the armed services. For an ordinary private the allotment is 6 hectares of irrigated or 12 hectares of seasonal land. The allotment for a division general is 100 hectares of irrigated land or 200 hectares of seasonal land or 5,000 hectares of pasture land.²⁴ During the period 1941-44 three such colonies were established, involving 124 colonists and 7,811 hectares of land. This would make an average of 63 hectares per person.

Data are available on the number of colonies established and the amount of land colonized from 1916 to 1943 (Table 22). This corre-

23. *Ibid.*, pp. 8, 9.

24. *Ibid.*, p. 70.

sponds to the period of the agrarian program and gives some indication of the land distribution outside this program. Altogether, during the period 1916-43, 177 colonies were formed, in which 13,746 colonists settled. The total area of land occupied by these colonists amounts to 1,247,807 hectares, or an average of 90.8 hectares per colonist. More than half the total number of colonists settled in the north region and two-thirds of the land colonized is found there (Appen. A, Table 15). The least amount of colonization has taken place in the Gulf and the south Pacific regions. Of the land colonized, 60.7 per cent has been taken from private holdings and 39.3 per cent from

TABLE 22
NUMBER OF COLONIES ESTABLISHED AND AMOUNT OF LAND
COLONIZED IN MEXICO FROM 1916 TO 1943, BY YEARS*

Year	No. of Colonies	No. of Colonists	Total No. of Hectares	Average No. of Hectares per Colonist
1916-19.....	2	389	26,658	68.5
1920-24.....	9	879	101,839	115.9
1925-29.....	3	288	38,508	133.7
1930-34.....	64	4,092	269,527	65.9
1935-39.....	54	6,453	411,924	63.8
1940-43.....	28	1,026	123,649	120.5
Unknown.....	17	619	275,702	445.4
Total.....	177	13,746	1,247,807	90.8

* Data compiled from the records of the Departamento de Colonización, Secretaría de Agricultura y Fomento.

government lands (Appen. A, Table 15). Thus the colonization program has definitely supplemented the ejido program in the redistribution of land into smaller holdings.

LAND MADE AVAILABLE THROUGH IRRIGATION PROJECTS

The development of small holdings has been enhanced by the construction of irrigation works in various parts of Mexico. In many instances these irrigation works have served to make land available for farming which formerly was too dry to produce crops. In other cases land that was farmed but yielded very little because of lack of moisture has been made highly productive through irrigation.

Long before the Spaniards arrived in the New World, the Indians had small irrigation projects with which they irrigated some of their lands. After the colonial plantations were established, private irrigation systems were constructed, especially in the sugar-producing sections of the state of Morelos and later in the cotton-producing areas of

the Laguna, in the vegetable lands of Sinaloa, and in the Mexicali Valley of Lower California. It is estimated that by 1910 there were about 700,000 hectares of land under irrigation in Mexico.

As a part of the revolutionary program the Mexican government has considered the further development of irrigation systems as a fundamental part of the agrarian program, along with the redistribution of land and colonization. A national Irrigation Commission was organized in 1926 and until December, 1946, served as a department in the Secretariat of Agriculture. President Alemán considers the problems of irrigation so important to the welfare of the nation that he has created a new cabinet post to have charge of a Secretariat of Hydraulic Resources. The construction of irrigation systems, therefore, is officially recognized as a fundamental responsibility of the federal government. The funds allotted for irrigation projects by the Mexican government during the five-year period 1941-45 were as follows:

	Pesos
1941	55,000,000
1942	65,000,000
1943	85,000,000
1944	107,000,000
1945	145,000,000
Total	457,000,000 ²⁵

Thus the expenditures for irrigation have been greatly augmented during recent years. In 1945 about 10 per cent of the federal budget was allotted to the development of irrigation projects. Some of these are large, expensive projects designed to benefit large areas; others are small projects. In 1945 about 15,000,000 pesos went into small projects, principally in the Central Mesa. In his inaugural address on December 1, 1946, President Alemán indicated that it was the intention of his administration to spend 1,500,000,000 pesos (about \$309,-280,000) on irrigation projects and that these would benefit about 1,500,000 hectares of land. The Secretariat of Hydraulic Resources is planning the development of what are referred to as three Mexican T.V.A.'s. One of these will dam the Papaloapan River near Veracruz; the second will dam the Río del Fuerte in northern Sinaloa; and the third is being planned for central Oaxaca.

As a result of irrigation projects, a total of 801,379 hectares of land

25. Data from Adolfo Orive Alba, "La Política de irrigación," *Irrigación en México*, XXVI, No. 1 (January-February, 1945), 7-41.

were brought under irrigation between 1928 and 1944.²⁶ These lands have been made available to small-scale farmers through colonization, through the agrarian program, or by means of outright purchase.

A total of 107,742 families have been accommodated, and they have received an average of 7.4 hectares each (Appen. A, Table 16). Of the total area made available through irrigation, 60.4 per cent has gone to ejidatarios and 39.6 per cent to private holders.

PRESENT DISTRIBUTION OF RURAL LANDHOLDINGS

Having considered at some length in this and the preceding chapter the redistribution of land that has been going on in Mexico for the last thirty years, it seems appropriate at this point to take stock of the types of rural landholdings that now prevail. After redistributing through the agrarian program a total of more than 30,000,000 hectares, or an area equal to about 22 per cent of the total area censused in the Republic in 1940, and after promoting the extension of small holdings through colonization programs and the development of irrigation projects, what is the present status regarding landholdings? What proportion of the land is now in large holdings; what proportion is in ejidos; and how much is in small private holdings of various types?

TYPES OF PRIVATE LANDHOLDINGS

There are no generally accepted labels in Mexico for distinguishing among the various types of private holdings. McBride refers to all private holdings smaller in size than the hacienda, as "ranchos." The experience of the author, however, indicates that properties of less than about 5 hectares (12.4 acres) are seldom referred to as ranchos. They are more commonly called *granjas* or *solares*, depending upon their size. The following classification of holdings according to size seems to be about as commonly used as any, although it is far from being universally accepted.

I. The "*solar*" ("lot").—Ordinarily this term is used to refer to holdings of less than about 1 hectare in size. Some of these constitute what was left to the Indian after his other lands were encroached upon by the large landowners. Many others have arisen out of the reshuffling of land that has gone on since 1920, and especially since 1930. The plots are often found within the limits of the village and extend back from the villagers' houses. These holdings constitute 17.6 per cent of

26. It was estimated that at the close of the Avila Camacho regime a total of 1,000,000 hectares would have been brought under irrigation since 1928.

all landholdings in Mexico (including ejidos) that were included in the various agricultural censuses of 1940 (Appen. A, Table 17). They are too small to be of much significance economically except for providing space for domestic animals and for a small patch of corn. In some areas a few fruit trees are kept.

The proportion of all holdings of this type appears to be rather closely related to the density of population in the various regions. The central region is the most densely populated and has the highest proportion of these small holdings; the north Pacific region is the least dense, with the smallest proportion; the other regions arrange themselves almost in the order of their population density. The average size of these holdings is only $\frac{1}{2}$ hectare.

Although these holdings are important from the standpoint of number, they are insignificant from the point of view of land area involved. Only one-tenth of 1 per cent of the area of all landholdings is in holdings of this size. In no region does the proportion reach more than 1 per cent (see Table 23).

2. *The "granja."*—This term is being increasingly used to refer to a small, privately owned, tillable plot which varies in size from about 1 to 5 hectares. Fifteen per cent of all landholdings in Mexico consist of plots varying from 1 to 5 hectares, the average size being 2.3 hectares.

Some of these holdings probably date back to the time that the lands of the landholding villages were distributed among the village families in compliance with the Reform Laws initiated by Benito Juárez. A few probably represent remnants of land which were granted in the form of *peonías* to the rank and file of the conquistadors and were later broken up into smaller units, while others have resulted from the shifting of property rights as a result of the Revolution. The proportion of all holdings of this type varies by regions from 10.1 per cent in the north Pacific to 25.1 per cent in the south Pacific.

Although this type of holding accounts for 15 per cent of all landholdings, it constitutes less than 1 per cent (0.71) of the land that was included in the various agricultural censuses of 1940.

3. *"Pequeña propiedad"* ("small holding").—This term has grown out of the agrarian program. It refers generally to that part of the hacienda which was exempt from expropriation when agrarian laws were applied. The amount exempt from expropriation and left in possession of the owner after the rest of his land was given to ejidatarios was usually from 100 to 150 hectares of irrigable land or its equivalent. The *pequeña propiedad*, therefore, may be thought of as the nucleus of a former hacienda. It usually contains from 100 to several

hundred hectares of land, together with the old hacienda buildings. The landholder is now often referred to as a *pequeño propietario* ("small owner"). It is difficult to tell just how many properties would now qualify for the term *pequeña propiedad*. Only 1.4 per cent of the holdings in the Republic are from 100 to 500 hectares in size, and these account for 7 per cent of the land censused in 1940. Many of these would undoubtedly be ranchos; hence they will be included in the succeeding category.

4. *The rancho*.—Rural properties ranging in size from 5 to about 1,000 hectares are commonly referred to as "ranchos," except for the remnants of old haciendas, which, as noted above, are *pequeñas propiedades*. The term "rancho," however, varies somewhat in different parts of the country. In the north it may include a holding of several thousand hectares.

Holdings varying from 5.1 to 1,000 hectares (including the *pequeña propiedad*) amount to 9.9 per cent of all landholdings and 14.9 per cent of the land censused in 1940. The average size of these holdings is 69.8 hectares.

The proportion of landholdings of this type is greatest in the north and smallest in the central region. In the north it accounts for 17.2 per cent of all holdings; it is 16.1 per cent in the Gulf states, 11.2 in the north Pacific, 7.7 in the south Pacific, and only 6.7 in the central region.

5. *The hacienda or large holding*.—This term is often used to indicate properties with more than 1,000 hectares (2,471 acres) of land. As noted in chapter v, however, the term "hacienda" refers to the organization of the enterprise as well as to the size of holding. In the central region a landholding of 1,000 hectares would ordinarily be organized on the hacienda pattern; but in the semiarid region of the north, cattle ranches might reach 20,000 hectares or more in size before taking on the organizational aspects of an hacienda (namely, a large resident labor force, administrator, and absentee ownership). Even the organizational use of the term varies from one region to another. As noted earlier, in parts of the states of Chiapas and Tabasco, for example, the term "hacienda" refers to the land devoted to a given crop, while the term *finca* is used to denote the landholding and the organization of the enterprise.²⁷

In 1940 there still remained in Mexico 9,697 holdings having more than 1,000 hectares. There were 1,472 with over 10,000 hectares and 301 holdings that contained more than 40,000 hectares. All holdings

27. This is more in keeping with usage in the Central American republics.

with more than 1,000 hectares constitute only 0.3 per cent of the total landholdings. These will be discussed further in the succeeding pages.

NET RESULT OF LAND-REDISTRIBUTION PROGRAM

In 1940 there were 2,820,321 landholdings in the Republic, and, of these, 56.8 per cent were in possession of ejidatarios and 43.2 per cent were private or individual holdings (Appen. A, Table 17). The size and distribution of the ejido holdings are discussed in chapters ix and xi so there is no need to repeat this here, except to say that the great majority are small subsistence plots.

It is obvious from Appendix A, Table 17, that among the private holdings the majority are also small subsistence plots, since there are 497,372 holdings with less than 1 hectare of land and 431,221 holdings with 1-5 hectares. In other words, three-fourths of all private holdings in 1940 consisted of only 5 hectares or less and accounted for one-third of all holdings in the Republic, including the ejidos.²⁸ The number of private holdings having 5 hectares or less of land increased 61 per cent during the decade from 1930 to 1940. The area of land involved in these small holdings increased 136 per cent during the same decade. Thus the various programs have resulted in the rapid and widespread development of the small private holding as well as in the formation of ejidos.

Families on these small, privately held plots with 5 hectares or less use about the same farming techniques as do the ejidatarios.²⁹ Both groups are usually referred to as *campesinos* ("peasants"). These two groups in 1940 constituted nine-tenths (89.7 per cent) of all the agricultural landholders in Mexico. Only 10.2 per cent of the landholders have private holdings with more than 5 hectares. Only 1.9 per cent have more than 100 hectares and 0.3 per cent more than 1,000 hectares. From the standpoint of the number of holdings it appears that landholding is now rather widely diffused (regional differences are given in Appen. A, Table 17).

From the standpoint of the amount of land involved, however, an entirely different picture is presented. The ejidatarios with 56.8 per

28. On the collective ejidos the land is not divided into plots among ejidatarios (see chap. ix), but each ejidatario has a right to share in the farm enterprise; for the purposes of the discussion in the following paragraphs they are referred to as if they were separate plots with each ejidatario counted as a landholder. The ejidos are therefore counted as if they constituted as many holdings as there are ejidatarios.

29. With the exception of a few of the ejidatarios living on collective ejidos, which use thoroughly modern techniques.

cent of the landholdings have only 22.4 per cent of the land censused in 1940 (Table 23). The small private landholders having only 5 hectares or less, although constituting one-third of the holders, have less than 1 per cent (0.8) of the land.

At the other extreme, holders having more than 1,000 hectares, although accounting for only 0.3 per cent of the holders, have 61.9 per cent of the land. Holders having more than 40,000 hectares have a

TABLE 23
PERCENTAGE OF TOTAL LAND CENSUSED IN MEXICO IN 1940 FOUND IN
EACH SIZE OF HOLDING INDICATED, BY REGIONS*

SIZE OF PRIVATE HOLDINGS (HECTARES)	TOTAL MEXICO	PERCENTAGE OF LAND BY REGION				
		North Pacific	North	Central	South	South Pacific
Under 1	0.1	0.01	0.01	0.7	0.1	0.1
1 - 5	0.7	0.3	0.2	2.9	0.6	1.4
5 1- 10	0.4	0.2	0.2	1.3	0.6	0.4
10 1- 25	1.0	0.5	0.6	2.9	1.7	0.8
25 1- 50	1.3	0.7	0.8	3.4	2.0	1.1
50 1- 100	1.5	1.0	1.2	4.7	2.3	1.7
100 1- 200	2.6	1.3	1.7	6.3	3.3	2.6
200 1- 500	4.4	4.9	3.3	7.4	4.9	5.1
500 1- 1,000	3.4	3.9	2.9	4.4	3.6	4.2
1,000 1- 5,000	12.0	29.3	11.1	9.9	10.4	12.8
5,000 1-10,000	7.5	12.7	7.4	4.7	6.7	6.6
10,000 1-20,000	6.2	12.8	9.9	4.7	6.5	6.3
20,000 1-40,000	3.2	7.7	12.1	1.5	3.4	7.5
Over 40,000	25.0	15.5	29.4	6.8	26.2	31.6
Total private holders	77.5	72.8	89.6	61.6	77.5	82.2
Ejidos†	22.4	26.2	12.4	38.4	22.7	17.8
Total Land Holders	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 24
NUMBER AND SIZE OF LANDHOLDINGS IN MEXICO WITH MORE
THAN 1,000 HECTARES OF LAND, BY REGIONS, 1940*

REGIONS	1,000.1 TO 5,000 HECTARES	5,000.1 TO 10,000 HECTARES	10,000.1 TO 25,000 HECTARES	20,000.1 TO 40,000 HECTARES	OVER 40,000 HECTARES	TOTAL OVER 1,000 HECTARES	TOTAL OVER 10,000 HECTARES
Number of Holdings							
North Pacific...	1,226	229	125	44	22	1,646	191
North.....	3,219	725	426	282	186	4,838	894
Central.....	841	120	61	9	8	1,039	78
Gulf.....	823	155	81	49	48	1,156	178
South Pacific...	774	113	58	36	37	1,018	131
Total Mexico	6,883	1,342	751	420	301	9,697	1,472
Percentage Distribution							
North Pacific...	17.8	17.1	16.6	10.5	7.3	17.0	13
North.....	46.8	54.1	56.7	67.1	61.8	49.9	61
Central.....	12.2	8.9	8.1	2.1	2.7	10.7	5
Gulf.....	12.0	11.5	10.8	11.7	15.9	11.9	12
South Pacific...	11.2	8.4	7.7	8.6	12.3	10.5	9
Total Mexico	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Preliminary data from Dirección General de Estadística.

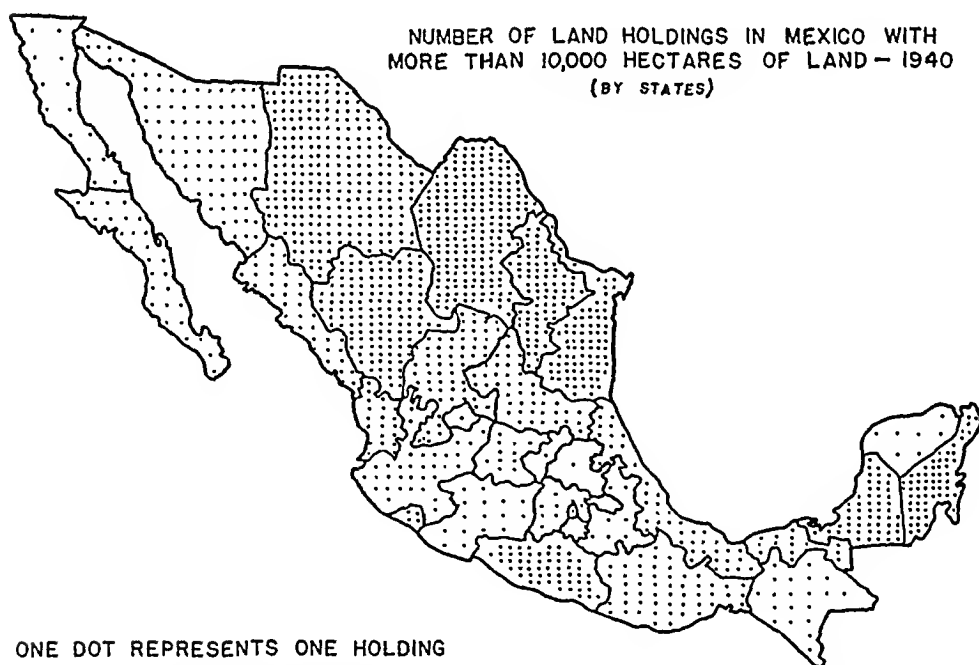


FIG. 19.—Map showing location, by states, of all the landholdings in Mexico having more than 10,000 hectares in 1940. Based on Appendix A, Table 18.

the north Pacific regions, where it is too dry for farming without irrigation. There are 1,472 holdings having more than 10,000 hectares. These are plotted by states on the map in Figure 19. The vast majority (61 per cent) are found in the north. There are also fairly large numbers in the more isolated states of Guerrero, Oaxaca, Campeche, and Quintana Roo. On the other hand, they are very scarce in the central region. No holdings of this size are now found in the states of Morelos and Tlaxcala. Only one is found in each of the states of Aguascalientes, Querétaro, and Hidalgo. Seven are found in the state of México and seven in Puebla. The number of private holdings with more than 1,000 hectares of land decreased 27.6 per cent during the decade 1930-40. The area of land involved in holdings of this size decreased 22.6 per cent during the same decade. The number of holdings having over 10,000 hectares decreased 18.8 per cent from 1930 to 1940, and the area of land involved decreased 21.2 per cent.

A comparison of Figure 19 with the map showing the distribution of population (Fig. 7) reveals that the large landholdings are now found in the areas where the rural population is less dense and that there are very few in areas where the rural population is dense.

Of the 301 holdings with more than 40,000 hectares each, 186 (61.8 per cent) are found in the north. A much larger proportion of the holdings in each category of Table 24 is to be found in the north than in any other region. This simply means that a much larger proportion of the large holdings escaped expropriation in the drier regions, where the land would be less useful for ejidos and where the population is much less dense (see Fig. 3, p. 8). On the other hand, there are now five states in the central region in which the ejidatarios have possession of more than 50 per cent of all the land censused in 1940 (Appen. A, Table 19). There are thirteen states in the Republic wherein the ejidatarios now have more than 50 per cent of all crop land censused in 1940 (Appen. A, Table 20).

That a much larger proportion of the land now found in private holdings is unsuitable for cultivation than is the case on the ejidos is obvious from Table 25. The ejidos have 47.4 per cent of the crop land, while the private holdings have 52.6 per cent. The ejidos have 56.2 per cent of the *irrigated* crop land and the private holdings only 43.8 per cent. On the other hand, the ejidos have only 18.7 per cent of the other land, including pasture, forests, and the agriculturally nonproductive land, while 81.3 per cent is contained in the private holdings. Thus a large proportion of the land in the large holdings appears to be of questionable value agriculturally.

TABLE 25
PROPORTION OF VARIOUS TYPES OF LAND FOUND IN EJIDOS
COMPARED WITH THAT FOUND IN PRIVATE HOLDINGS*

TYPES OF LAND	LAND IN EJIDOS		LAND IN PRIVATE HOLDINGS		TOTAL LAND CENSUSED IN 1940	
	No. of Hectares	Per Cent	No. of Hectares	Per Cent	No. of Hectares	Per Cent
Crop land	7,045,221	47.4	7,828,763	52.6	14,873,984	100.0
Irrigated	1,067,202	56.2	833,358	43.8	1,900,560	100.0
Humid	398,259	41.2	567,505	58.8	965,764	100.0
Seasonal	5,579,760	46.5	6,427,900	53.5	12,007,660	100.0
Other Land	21,877,639	18.7	94,848,972	81.3	116,726,611	100.0
Pasture	10,659,953	18.3	47,524,741	81.7	58,184,694	100.0
Forest	6,873,026	17.8	31,784,610	82.2	38,657,636	100.0
Other productive noncultivated	1,696,437	19.1	7,208,480	80.9	8,904,917	100.0
Agriculturally non-productive	2,648,223	24.1	8,331,141	75.9	10,979,364	100.0
Total	28,922,860	22.0	102,677,735	78.0	131,600,595	100.0

* Preliminary data from *Segundo censo ejidal* and from *Segundo censo agrícola-ganadero* (1940).

TABLE 26
CHANGES IN THE NUMBER AND SIZE OF PRIVATE LANDHOLDINGS
IN MEXICO, 1930-40*

SIZE OF HOLDINGS (HECTARES)	1930		1940		PERCENTAGE INCREASE (+) or DECREASE (-) (1930-40)
	No. of Holdings	Per Cent of Holdings	No. of Holdings	Per Cent of Holdings	
Under 1	244,108	28.6	497,372	40.8	+ 103.7
1 - 5	332,439	38.9	431,221	35.4	+ 29.7
5.1- 10	79,112	9.3	74,187	6.1	- 6.2
10.1- 50	114,681	13.4	128,479	10.5	+ 12.0
50.1- 100	26,324	3.1	31,763	2.6	+ 20.7
100.1- 200	18,950	2.2	22,695	1.9	+ 19.7
200.1- 500	17,054	2.0	17,428	1.4	+ 2.2
500.1- 1,000	7,908	0.9	6,087	0.5	- 23.0
1,000.1- 5,000	9,828	1.2	6,883	0.6	- 30.0
5,000.1-10,000	1,785	0.2	1,342	0.1	- 24.8
Over 10,000	1,831	0.2	1,472	0.1	- 19.6
Total	854,020	100.0	1,218,929	100.0	+ 42.7

* Preliminary data from Dirección General de Estadística.

The combined effects of the agrarian program and the colonization and irrigation projects upon the number and size of private landholdings during the decade 1930-40 may be seen in Table 26. The total number of private landholdings increased from 854,020 in 1930 to 1,218,929 in 1940, an increase of 42.7 per cent. In general, it may be said that the combined programs have greatly increased the number of small private holdings and decreased the number of large holdings. The very small holdings with less than 1 hectare increased 103.7 per cent. At the other extreme there was a decline in the number of holdings in each category listed having beyond 500 hectares. The greatest decline was for holdings with from 1,000.1 to 5,000 hectares.

It is impossible to say to what extent the land-redistribution program has now run its course. Future irrigation projects undoubtedly will continue to make more land available to small holders. While there still remain a number of large holdings in various parts of the country, it is impossible to say what the future policy of the government will be toward them; and data which would indicate their suitability for division into small holdings are lacking. Signs seem to point toward a tapering-off of the land-redistribution program.

small shopkeepers or other persons whose traditional occupation is not farming. Their interests might be closely bound up with the ejido, but they would not be considered members of it. Other residents of the village who do not belong to the ejido are those families who were already in possession of small private holdings of their own and for this reason did not qualify to receive land under the agrarian laws. In the larger villages and towns there might be two or more ejidos in the same village; or the ejido population might constitute only a fraction of the total population of the town.

The lands of any given ejido do not always form a contiguous block.

LOCATION OF EJIDOS IN THE YAQUI VALLEY

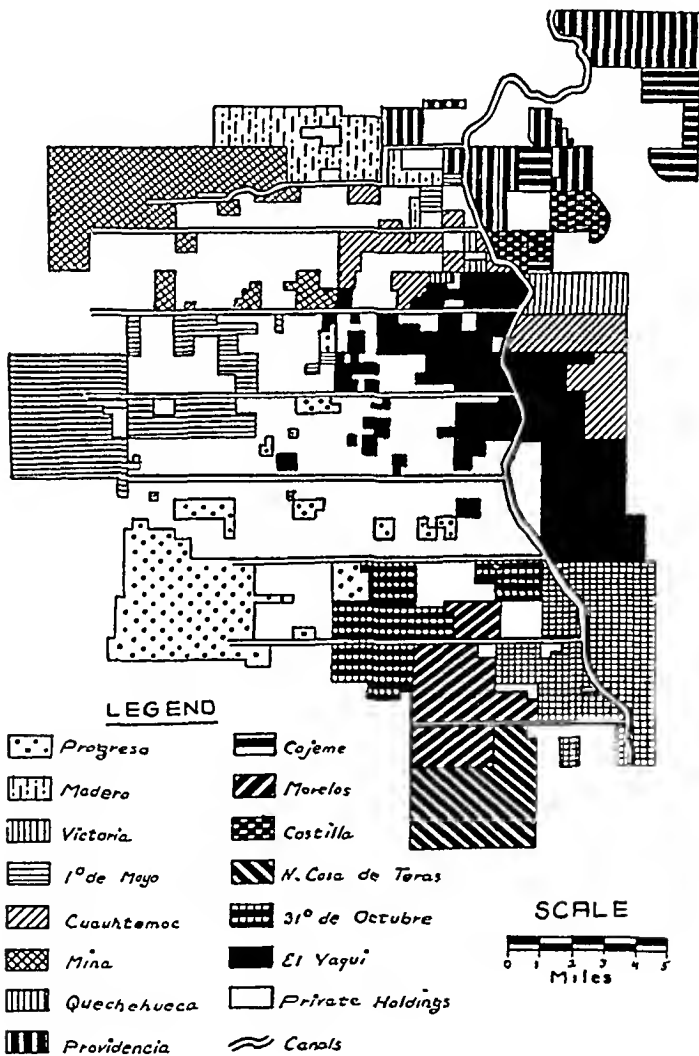


FIG. 20.—Lands belonging to fourteen ejidos in the Yaqui Valley. Each type of shading represents a different ejido. The white spaces among the ejidos are private holdings.

They are often interspersed with the remnants of the pre-existing hacienda from which the ejido lands were taken. Ordinarily, when lands were expropriated, the hacendado was permitted to select the land he wished to retain, and he often chose irregularly shaped areas in order to include what he regarded as the most desirable for his purpose. Figure 20 shows the ejido lands of fourteen ejidos in the Yaqui Valley of southern Sonora in relation to the land that was left to the hacendados.

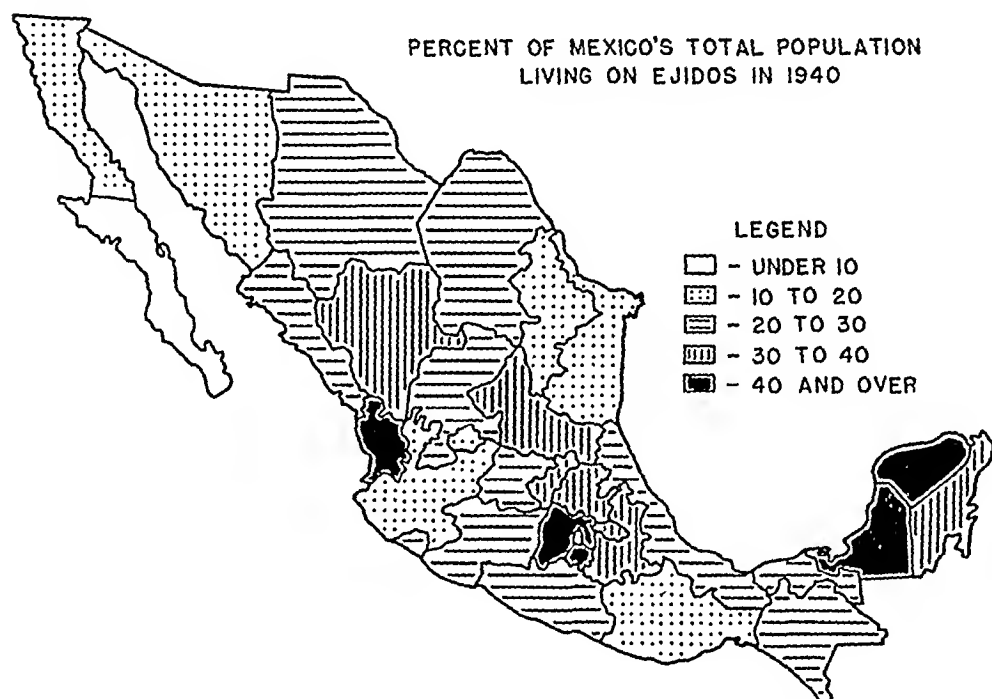


FIG. 21.—Percentage of Mexico's total population living on ejidos in 1940, by states. Based on Appendix A, Table 21.

Each type of shading in Figure 20 represents lands belonging to a given ejido. The white areas (both small and large) among the various types of shadings represent private holdings still belonging to former hacendados from whom the ejido lands were taken. The name of the ejido in possession of the land represented by each type of shading is given under the legend in the lower left-hand corner. It may be noted that the lands of the ejido Progreso (the dotted areas—mostly in the lower left-hand corner) are nearly all in one block, but this particular ejido also has fragments of land distributed among the private holdings and among other ejidos in about eleven different locations. Some of the plots owned by this ejido are completely sur-

TABLE 27
DISTRIBUTION OF EJIDOS, EJIDATARIOS, AND EJIDO FAMILIES
BY REGIONS AND STATES*

Region and State	Total No. of Ejidos	Total No. of Ejidatarios	Average No. of Ejidatarios per Ejido	Total No. of Ejido Families†	Average No. of Families per Ejido
North Pacific.....	1,004	103,792	103.4	55,978	55.8
Baja California N.	76	3,627	47.7	2,335	30.7
Baja California S.	32	2,410	75.3	1,025	32.0
Nayarit.....	230	29,137	126.7	17,465	75.9
Sinaloa.....	441	41,944	95.1	21,034	47.7
Sonora.....	225	26,674	118.6	14,119	62.8
North.....	3,791	318,115	83.9	203,640	53.7
Coahuila.....	553	46,240	83.6	29,822	53.9
Chihuahua.....	447	42,725	95.6	28,480	63.7
Durango.....	545	59,046	108.3	35,683	65.5
Nuevo León.....	386	20,909	54.2	12,486	32.3
San Luis Potosí.....	711	70,167	98.7	45,688	64.3
Tamaulipas.....	635	26,493	41.7	18,622	29.3
Zacatecas.....	514	52,535	102.2	32,859	63.9
Central.....	6,062	800,599	132.1	503,987	83.1
Aguascalientes.....	153	9,103	59.5	6,682	43.7
Distrito Federal.....	74	32,719	442.1	16,928	228.8
Guanajuato.....	964	74,389	77.2	46,491	48.2
Hidalgo.....	611	84,565	138.4	53,094	86.9
Jalisco.....	875	82,432	94.2	52,895	60.5
México.....	889	173,765	195.5	115,545	130.0
Michoacán.....	1,063	118,169	111.2	71,140	66.9
Morelos.....	199	29,218	146.8	18,204	91.5
Puebla.....	801	138,348	172.7	86,615	108.1
Querétaro.....	254	25,396	100.0	15,838	62.4
Tlaxcala.....	179	32,495	181.5	20,555	114.8
Gulf.....	2,315	209,705	90.6	150,233	64.9
Campeche.....	118	10,283	87.1	7,329	62.1
Quintana Roo.....	35	1,895	54.1	1,226	35.0
Tabasco.....	322	21,847	67.8	15,333	47.6
Veracruz.....	1,383	114,259	82.6	82,037	59.3
Yucatán.....	457	61,421	134.4	44,308	97.0
South Pacific.....	1,511	169,181	112.0	111,596	73.9
Colima.....	85	5,138	60.4	3,439	40.5
Chiapas.....	439	50,245	114.5	34,456	78.5
Guerrero.....	567	62,940	111.0	39,158	69.1
Oaxaca.....	420	50,858	121.1	34,543	82.2
Total.....	14,683	1,601,392	109.1	1,025,434	69.8

* Data compiled from *Segundo censo ejidal* (1940) (Dirección General de Estadística).

† This includes all families in which there are one or more *ejidatarios* according to the *Censo ejidal*.

rounded by private holdings and are located more than 5 miles from the main lands of this ejido. Fragments of land belonging to other ejidos are similarly scattered.

SIZE OF THE EJIDO POPULATION

In 1940 there were 4,992,058 inhabitants living on ejidos, and these comprised one-fourth of the total population of Mexico. The numerical importance which the ejido population has now attained in the life of the nation is emphasized in Figure 21. There are five states in

TABLE 28
EJIDOS AND EJIDATARIOS CLASSIFIED ACCORDING TO
NUMBER OF EJIDATARIOS PER EJIDO*

No. of EJIDATARIOS PER EJIDO	EJIDOS		EJIDATARIOS	
	No.	Per Cent of Total	No.	Per Cent of Total
None.....	32†	0.2	.....	.....
1- 20.....	818	5.6	12,936	0.8
21- 40.....	3,458	23.6	106,338	6.6
41- 70.....	3,670	25.0	199,890	12.5
71-100.....	2,120	14.4	178,476	11.1
101-150.....	1,858	12.7	227,828	14.2
151-200.....	863	5.9	159,326	9.9
201-300.....	899	6.1	218,816	13.7
301-400.....	418	2.8	144,805	9.0
401-500.....	219	1.5	88,079	5.5
501-800.....	219	1.5	136,126	8.5
801 and over.....	109	0.7	128,772	8.0
Total.....	14,683	100.0	1,601,392	100.0

* Preliminary data from *Segundo censo ejidal* (1940) (Dirección General de Estadística).

† Evidently these ejidos had been abandoned at the time of the census.

which the ejido population exceeds 40 per cent of the total state population—Nayarit, 40.3 per cent; Campeche, 40.5 per cent; Morelos, 47.8 per cent; México, 48.4 per cent; and Yucatán, 51.9 per cent. When related to the population of localities with less than 10,000 inhabitants for the country as a whole, the ejido population constitutes 32.5 per cent; it is 39.1 per cent of the population living in places with less than 2,500 inhabitants (Appen. A, Table 21).

The number and distribution of ejidos, ejidatarios, and ejido families are given by states and regions in Table 27. As of 1940 there were 14,683 ejidos in the Republic, and on them were found 1,601,392 ejidatarios. This gives an average of 109 ejidatarios per ejido for the country as a whole. From the standpoint of the number of ejidatarios involved, the ejidos in the central region tend to be the largest, with

an average of 132 ejidatarios per ejido as compared with the national average of 109. Those in the north are smallest, with an average of only 83.9 ejidatarios. By states, the largest number of ejidatarios per ejido is found in the Distrito Federal, with 442. The smallest number, 41.7, is found in Tamaulipas.

There are 1,025,434 families living on ejidos in Mexico, with an average of 69.8 families per ejido (last two columns of Table 27).

The number of ejidatarios varies greatly from one ejido to another. Thirty-two ejidos in the Republic are listed as having no ejidatarios (Table 28). This means that the lands which were granted have been abandoned, for one reason or another, and that the former ejidatarios have migrated elsewhere. There are 818 ejidos which have from 1 to 20 ejidatarios. It will be recalled from an earlier discussion that, according to the Agrarian Law, at least twenty eligible persons were required to petition for land before an ejido could be established. This does not mean that there are no ejidos with less than twenty ejidatarios, however, because, once established, some of the ejidatarios could leave without their departure disrupting the ejido. Nearly half the ejidos (48.6 per cent) have between 21 and 70 ejidatarios. There are 109 ejidos which contain over 800 ejidatarios each.

ORGANIZATION OF THE EJIDO

The organization of the ejido is legally prescribed by the Agrarian Code. Each ejido is a legal entity. Ultimate local authority is vested in the general assembly, with administrative functions delegated to two local committees: (1) the *comisariado ejidal* (a sort of executive committee), consisting of three elected members with three alternates, and (2) the vigilance committee, also consisting of three elected members and three alternates.

THE GENERAL ASSEMBLY

As the name implies, the assembly comprises all the ejidatarios in a given ejido. Meetings are usually held once each month at the call of the *comisariado ejidal*, notice of which must be given at least one week in advance. A quorum at these meetings consists of one-half the total number of ejidatarios plus one. If there is not a quorum as a result of the first call, a second notice is given, in which it is indicated that this second meeting will be deemed legal and its results binding upon all, regardless of the number attending. The members of the *comisariado ejidal* are elected for a term of three years by majority vote of the general assembly. Unless the vote is unanimous, however,

the minority elects the members of the vigilance committee. Otherwise, members of the vigilance committee must be elected by unanimous vote also. Members of either committee may be re-elected only by a two-thirds majority vote. The principal functions of the general assembly are specified in the Agrarian Code as follows:

I. To elect and remove the members of the *Comisariado Ejidal* and the members of the Vigilance Committee in accordance with the provisions of the Code.

II. To authorize, modify or rectify the decisions of the *Comisariado Ejidal* whenever this is in order according to law.

III. To discuss and approve, in the respective case, the reports rendered by the *Comisariado Ejidal* and to order that the statements of account which they approve be posted up in a visible place in the centre of population.

IV. To request the intervention of the agrarian authorities on matters relating to . . . the suspension or privation of rights of members of the ejido.

V. To issue rulings connected with the form in which the lands held in common by the ejido should be used, which rulings must be approved and regulated by the Ministry of Agriculture or by the National Ejido Bank.³

THE EXECUTIVE COMMITTEE⁴

The executive committee is charged with active management of the affairs of the ejido. The three members serve as chairman, secretary, and treasurer, respectively (see Pl. V). In order to qualify for candidacy to membership on this committee, an individual must be an ejidatario in full enjoyment of his rights and privileges and must have lived in the ejido for at least six months immediately prior to the election. He must also be able to read and write and must have a record of good conduct. The general functions of the committee are as follows: (1) to represent the ejido with power of attorney before administrative and judicial authorities; (2) to administer such ejido property as is used collectively; (3) to exercise vigilance over the division of collective lands into plots; (4) to call a meeting of the general assembly at least once a month or whenever the vigilance committee, the Agrarian Department, the Ministry of Agriculture, or the National Ejido Bank may request; (5) to acquaint the general assembly with the work carried out, to account for the expenditure of funds, and to make such proposals as may be deemed advisable; and (6) to comply with and enforce the rulings of the general assembly.

Once having been elected, a member of the executive committee may be removed from office, prior to the expiration of his term, for the following reasons (Art. 43): (1) failure to comply with the de-

3. *Nuevo código agrario* (Mexico City, 1943), Art. 42.

4. For purposes of convenience to the reader the *comisariado ejidal* will be referred to in the remaining part of this section as the "executive committee."

cisions of the general assembly; (2) violation of the provisions of the Agrarian Code; (3) disobeying the rulings of the Agrarian Department, the Ministry of Agriculture, or the National Ejido Bank within their respective jurisdictions; (4) misappropriation of funds; (5) having been prosecuted for any offense punishable by imprisonment; or (6) for being absent from the ejido for more than three consecutive months without justified reason (Art. 24).

THE VIGILANCE COMMITTEE

As the name implies, the vigilance committee is charged with the duty of checking up on the activities of the executive committee to see that they are in accordance with the regulations of the Agrarian Code and to see that the mandates of the general assembly are carried out. The committee consists of three members, one of whom serves as chairman and another as secretary. Ordinarily, they are elected for a term of three years, but they may be removed from office by two-thirds majority vote of the general assembly for failure to perform duties intrusted to them or for any offense meriting imprisonment. Their duties, as specified in the Agrarian Code (Art. 45) are as follows:

I. To exercise care to insure that all acts of the Executive Committee are in accordance with the provisions of the Code and with the rulings issued governing the organization, administration and utilization of the ejidos, and to see that all other rulings of the law governing the activities of the Executive Committee are duly complied with.

II. To inspect monthly the accounts of the Executive Committee, and to formulate its observations to be submitted to the General Assembly.

III. To report to the Agrarian Department all matters which involve a change or modification of agrarian rights, and to the Ministry of Agriculture all anomalies or obstacles to the proper use of the property of the ejido, whenever the Executive Committee fails to report such matters.

IV. To request the Executive Committee to call a meeting of the General Assembly whenever the Vigilance Committee so deems advisable or whenever at least 25 per cent of the persons constituting the ejido so request.

V. Such other duties as are assigned to it by this Code, and other Laws and Regulations.

The ejido receives a certain amount of supervision and control from at least three federal agencies which have representatives located in every state and territory—the Ministry of Agriculture, the Agrarian Department, and the National Ejido Bank. The National Ejido Bank functions only among those ejidos to which it extends credit, and its functions will be discussed later in this chapter under the topic of ejido credit.

The Ministry of Agriculture has a special division whose function is to supervise the organization of the ejidos. It is known as the Division of Agrarian Ejido Organization (*Dirección de Organización Ejidal*). This division usually sends a representative to supervise ejido elections, and it is charged with the duty of deciding questions of organization in accordance with the specifications of the Agrarian Code. The Ministry of Agriculture is also charged with the following duties: (1) to encourage better agricultural practices that tend to improve the social and economic life of the ejidos; (2) to give an opinion on cases involving the withdrawal of agrarian rights, the weeding-out of names from the agrarian census, the merger and division of ejidos, the expropriation of ejido property, and the admission of additional ejidatarios; (3) to approve contracts which ejidos enter into among themselves or with third parties whenever the interests, resources, or utilities of the ejido may be involved; and (4) to co-ordinate the activities of the various dependencies of the Ministry of Agriculture to the end of improving the agriculture and the work of the ejidos (Art. 38).

FUNCTIONS OF THE AGRARIAN DEPARTMENT

After the ejido is once established, the principal function of the Agrarian Department is that of determining land boundaries and the settling of new boundary disputes which may arise.⁶ The head of the Agrarian Department is also charged with the responsibility "to act as the representative of the President of the Republic in all acts connected with the creation, recognition, modification and granting of rights based on this Code, except in the cases specifically reserved now to some other authority" (Art. 35).

From the foregoing it may be concluded that, in theory, the ejido is organized according to highly democratic principles. The ultimate authority, within the framework of the law, rests with the general assembly of ejidatarios, wherein each member has one vote. The general assembly elects its executive committee by majority vote and the committee is responsible to the assembly. A safeguard is provided against possible human frailties by electing a vigilance committee to check on the activities of the executive committee as a guaranty that they will truly serve the interests of the ejido and that

The primary function of the Agrarian Department is to carry out the presidential orders with reference to the expropriation of land and the formation of ejidos.

they will operate within the framework of the law. General supervision and guidance is provided for through the established agencies of the federal government.

EJIDO CREDIT

NATIONAL BANK OF EJIDO CREDIT⁶

The Ejido Bank was organized in 1936 for the purpose of supplying credit to the ejidatarios. About 16,000,000 pesos were transferred to it at that time from the National Agricultural Bank, and the latter institution was ordered to restrict its operations henceforth to non-ejido agriculture. According to a recent revision of the law of agricultural credit on March 27, 1943, the capital of the Ejido Bank may be variable but may never consist of less than 60,000,000 pesos made up from three series of stock at 10 pesos a share: Series A, whose total value shall be at least 55,000,000 pesos, may be subscribed only by the federal government; Series B, whose total value shall consist of at least 2,500,000 pesos, may be subscribed only by the governments of states and territories, including the Distrito Federal; Series C is subscribed by ejido credit societies and by private individuals, and its total value shall be at least 2,500,000 pesos. Of the total capital stock in the bank in 1943, which amounted to 151,431,050 pesos, the government had subscribed 147,354,750 pesos, or 97.3 per cent. The governments of states and territories had purchased no stock whatsoever. Ejido societies had subscribed only 2.7 per cent of the total stock.⁷

The proportion of stock held by the ejidatarios is very small and does not seem likely to increase much in the near future because, until 1942, all ejidatarios receiving loans were required to purchase shares of Series C stock, the value of which was deducted from the loans they received—1 per cent annually for short-term loans, 3 per cent deducted only once for intermediate term loans, and 5 per cent deducted only once for long-term loans. This compulsory purchase of Series C stock probably accounts for the small amount of stock the ejidatarios now possess. This requirement was revoked in 1942, with the provision that the equivalent of the amount that would otherwise be invested in stock should be set aside by ejido credit societies as a reserve fund with which to pay the bank for sums due at the death of a member or for paying debts resulting from dam-

6. For convenience this institution will be referred to as the "Ejido Bank," or merely as "the bank."

7. Data from Banco Nacional de Crédito Ejidal.

age to crops not covered by insurance.⁸ It would thus appear that virtual ownership or control of the bank by ejidatarios through purchase of stock, as was originally intended,⁹ has been abandoned as one of the objectives of the organization. The bank at present is definitely owned and controlled by the federal government.

The administration of the bank is under the direction of an administrative board. This board consists of nine members and six alternates. They are appointed for a period of four years. Six members and three alternates are in representation of Series A stock and are appointed by the president of the Republic upon recommendation of the secretary of agriculture. Among these, because of the nature of their positions, are the secretary of agriculture and the chief of the Agrarian Department. One member and one alternate correspond to Series B stock and would ordinarily be appointed by state governors, but, since the latter have not subscribed any stock, their corresponding representatives are at present also appointed by the president. The remaining two members and two alternates correspond to Series C stock and are elected by representatives of the ejidatarios in a general assembly. The secretary of agriculture is usually named as president of the administrative board, and the chief of the Agrarian Department as vice-president.

The central agency of the bank is located at Mexico City, and there are thirty-five branch agencies scattered throughout the Republic, located in what are termed "convenient areas." An agency usually covers a state, but in some cases its jurisdiction overlaps state boundaries. Each branch agency is, in turn, divided for convenient, local administration into smaller units referred to as "zones." The entire thirty agencies are divided into a total of 185 zones, there being, on the average, between five and six zones per agency.

Since ejido lands cannot be mortgaged or in any way alienated, the main source of security to the bank lies in the crops and the equipment accumulated. The interest rate is 8 per cent per annum. This will appear high to persons acquainted with farm-credit agencies in the United States, but it is considerably lower than the rate for agricultural loans made by most agencies in Mexico, where interest rates of 12 per cent and higher are common.

Although the capital of the bank is controlled by the federal government, private funds are loaned through the bank, with the latter

8. Banco Nacional de Crédito Ejidal, *Informe* (Mexico City, 1943), p. 15.

9. Clarence Senior, *Democracy Comes to a Cotton Kingdom: The Story of Mexico's La Laguna* (Mexico City, 1940), p. 21.

guaranteeing them. In such cases the bank pays 4.5 per cent interest to the private investors and retains 3.5 per cent. During the ten-year period from 1936 to 1945, 59 per cent of the amount of all loans were from private funds.

TYPES OF LOANS

The types of loans made by the bank may be classified roughly into the following groups:

1. *Short-term seasonal loans.*—These are by far the most important. They constitute 80.4 per cent of all loans made prior to 1943. They serve the purpose of financing the planting of the crop and the caring for it until the harvest is over. The term of the loan may be up to eighteen months and may amount to not more than 70 per cent of the annual value of the crop of the debtor.

2. *Intermediate-term loans.*—These are second in importance and amounted to 15.2 per cent of all loans made prior to 1943. They are made for the purpose of financing the purchase of farm machinery, tools, and livestock and the cultivation of cyclical crops, such as maguey or henequen, which require several years to mature. These loans may run for a term up to five years and may consist of an amount not exceeding 50 per cent of the income of the debtor during the period of the loan.

3. *Long-term loans.*—These constituted only 1.4 per cent of all loans made prior to 1943 and are granted for the purpose of making permanent improvements. They may be extended over a period not to exceed thirty years and may consist of not more than 30 per cent of the value of the income which the debtor expects to receive during the period of amortization.

4. *Other types.*—In addition to the above, there are a few other minor types which need not be described here, since each forms an insignificant proportion of the total loans. Altogether, they constituted 3.1 per cent of all loans made prior to 1943.

In 1945, 83.9 per cent of all loans were short-term, 9.9 per cent intermediate-term, 0.4 per cent long-term, and 5.8 per cent other types.

AMOUNT OF LOANS AND COLLECTIONS

During the first ten years of its existence (1936–45) the bank made loans to ejidatarios totaling about 741,892,000 pesos (Table 29). The amount of loans did not vary greatly from one year to another between 1938 and 1942. In 1943, however, the loans suddenly jumped from 68,000,000 to 103,000,000 pesos. In 1944 and 1945 the loans amounted to more than 108,000,000 pesos each year.

The bank has recovered 76.9 per cent of all loans, while 23.1 per cent has remained uncollected. Not all these uncollected accounts have become due, however, as may be seen from Table 30.

Of all funds loaned, 669,232,289.76 pesos had become due. Of this amount the bank had collected 85 per cent, leaving 15 per cent uncollected in delinquent accounts. A much higher proportion of due accounts has been collected in recent years than formerly. In 1938 only

TABLE 29
TOTAL AMOUNT OF LOANS AND COLLECTIONS
MADE BY THE EJIDO BANK, 1936-45*

Year	Loans (Pesos)	Collections (Pesos)	Percentage Recovered
1936.....	23,277,092.43	6,162,304.28	26.5
1937.....	82,880,019.25	14,348,729.11	17.3
1938.....	63,441,596.04	44,970,973.06	70.9
1939.....	61,176,991.38	48,736,687.81	79.7
1940.....	59,149,151.86	49,330,492.57	83.4
1941.....	63,419,067.04	46,655,972.85	73.6
1942.....	68,037,831.36	60,882,988.94	89.5
1943.....	103,257,130.31	86,778,117.26	84.0
1944.....	108,484,009.00	111,573,133.00	102.8
1945.....	108,767,509.53	101,111,727.20	93.0
Total.....	741,891,898.20	570,551,126.17	76.9

* Preliminary data from Banco Nacional de Crédito Ejidal.

TABLE 30
RELATION OF COLLECTIONS TO DUE ACCOUNTS IN THE EJIDO BANK, 1936-45*

Year	Amount Due from Ejidatarios on Loans Each Year (Pesos)	Amount Collected Each Year	Percentage of Due Ac- counts Col- lected Each Year	Percentage Total Col- lections Are of Due Accounts (Cumula- tive)	Percentage of All Funds in Delia- quent Ac- counts (Cumula- tive)
1936.....	9,721,839.34	6,162,304.28	63	63	37
1937.....	23,959,795.52	14,348,729.11	60	61	39
1938.....	87,745,635.22	44,970,973.06	51	54	46
1939.....	61,093,602.58	48,736,687.81	80	63	37
1940.....	59,331,466.45	49,330,492.57	83	68	32
1941.....	67,617,334.53	46,655,972.85	69	68	32
1942.....	72,356,562.94	60,882,988.94	84	71	29
1943.....	66,888,990.85	86,778,117.26	130	80	20
1944.....	104,511,264.87	111,573,133.00	107	85	15
1945.....	116,005,797.46	101,111,727.29	87	85	15
Total....	669,232,289.76	570,551,126.17	.....	85	15

* Data from Banco Nacional de Crédito Ejidal, *Informe* (1946), p. 14.

51 per cent of the due accounts were collected, in contrast to 130 per cent in 1943. In the latter year it appears either that collections were made on some of the delinquent accounts of preceding years or that some of the accounts were settled before they became due. In 1945 an 87 per cent recovery of accounts due on loans was made.

DISTRIBUTION OF EJIDO BANK FUNDS AMONG THE EJIDATARIOS

The Ejido Bank is almost the only source through which the ejidatarios are able to secure credit. This is because their lands cannot be mortgaged and the only security they have to offer is their crops. Private funds are invested, as we have noted, but these are guaranteed by the Ejido Bank and loaned through it. Yet in 1945 the bank was working with only about 14 per cent of the ejidatarios in the Republic,¹¹ while most of the other 86 per cent were substantially without any credit. In 1945 there were 451,948 ejidatarios (26 per cent of all ejidatarios in the Republic) organized into credit societies, but the bank was actually working with only 240,933. A few receive credit from other sources. This is true of the ejidos which produce sugar cane at El Mante in the state of Tamaulipas and at Zicatzen, Morelos. These two groups are financed through the National Labor Bank. The ejidos in the henequen district of Yucatán are financed through an organization known as Henequeneros de Yucatán. The majority, however, probably not fewer than 70 per cent, are left to the mercy of the loan sharks, who drive hard bargains. These *cooperadores* "monopolizers," as they are called, often pretend to charge no interest at all on loans; instead, they require the debtor to sign a contract for the sale of the crop at a specified price. The ejidatario, ignorant of market conditions, often signs an agreement which permits the *cooperador* to realize a net gain of 50 per cent or more on the money loaned.

Not only are the funds from the Ejido Bank restricted to a small proportion of the ejidatarios but they are distributed very unevenly among those who do receive them. The situation as it existed in 1944 is evident from Table 11. The ejidos located at Tuxtla, which are in the Laguna district receive 50.4 per cent of all loans granted.

11. The last complete census. The last official census taken in 1944 registered 1,000,000 ejidatarios. To this number was added the persons receiving land under the 1935-44 settlement. To the number was added the persons receiving land through the Departmental Bank during the years 1935-44. The total number of ejidatarios in the Republic at the end of 1944 was 1,700,000. The number of ejidatarios who received credit from the Ejido Bank in 1945 was 240,933. The bank itself estimated in 1945 that the total number of ejidatarios in the Republic was 1,700,000. The bank itself estimated in 1945 that the total number of ejidatarios in the Republic was 1,700,000. The bank itself estimated in 1945 that the total number of ejidatarios in the Republic was 1,700,000.

in 1944, yet it contains only 7.6 per cent of the ejidatarios who have been organized into credit societies by the bank.¹¹ The first five agencies listed in Table 31 together contain only 13.2 per cent of the ejidatarios organized by the bank, yet they received 63 per cent of all loans. The striking contrast in the amount of credit available to ejidatarios in various areas is illustrated by the fact that in Mexicali just

TABLE 31
FUNDS LOANED BY THE BANCO EJIDAL IN 1944 TO EJIDATARIOS
IN CREDIT SOCIETIES, BY AGENCIES*

Agencies	Total Amount of Loan, 1944 (Pesos)	Percentage of All Loans	No. of Ejidatarios in Credit Societies	Percentage of Ejida- tarios	Total Amount Loaned per Ejidatario
Torreón.....	38,395,968	35.4	33,101	7.6	1,159.96
Ciudad Obregón.....	9,317,783	8.6	8,848	2.0	1,053.09
Mexicali.....	7,852,051	7.2	1,905	0.4	4,121.81
Los Mochis.....	6,480,789	6.0	5,879	1.4	1,102.36
Cuernavaca.....	6,244,180	5.8	7,683	1.8	812.73
Tepic.....	4,500,710	4.1	6,251	1.4	620.00
Tapachula.....	4,191,531	3.9	11,883	2.7	352.65
Uruapan.....	3,217,942	3.0	4,015	0.9	801.48
Culiacán.....	2,885,272	2.7	6,738	1.6	428.21
Córdoba.....	2,856,526	2.6	27,625	6.4	103.40
Matamoros.....	2,584,429	2.4	3,751	0.9	689.00
Chihuahua.....	2,210,766	2.0	12,555	2.9	176.63
Guadalajara.....	2,113,049	1.9	21,992	5.1	96.09
Toluca.....	2,057,026	1.9	28,001	6.4	73.47
Ciudad Victoria.....	1,821,463	1.7	9,919	2.3	183.63
Morelia.....	1,565,499	1.4	18,956	4.4	82.59
Puebla.....	1,405,136	1.3	19,903	4.6	70.60
Colima.....	1,085,089	1.0	3,162	0.7	343.17
Iguala.....	978,673	0.9	12,204	2.8	80.19
Brisenías.....	970,270	0.9	8,483	2.0	114.38
Monterrey.....	932,139	0.8	8,335	1.9	111.83
Durango.....	923,196	0.8	14,455	3.3	63.87
Celaya.....	627,362	0.6	35,708	8.2	17.57
Pachuca.....	622,788	0.6	27,813	6.4	22.32
All others (nine).....	2,644,372	2.5	95,326	21.9	603.21
Total.....	108,484,009	100.0	434,491	100.0	249.68

* This includes all ejidatarios organized into credit societies in 1944 (data from Banco Nacional de Crédito Ejidal).

across the border from Calexico, California—one of the areas in Mexico where modern commercialized farming has developed—the average ejidatario received a loan of 4,121.81 pesos in 1944 as compared with the other extreme of only 17.57 pesos per ejidatario in Celaya in the central area.

11. The number of ejidatarios listed in Table 31 includes all who have been organized into credit societies. The number in the Republic actually receiving loans in 1944 was much smaller—259,971 instead of the 434,491 listed. In 1945, 31.6 per cent of all loans were made in the Laguna region.

The foregoing data on loans refer to the ejidatarios who have been organized into credit societies by the bank. In Table 32 the volume of loans in 1944, by regions, is related to the total number of ejidatarios included in the census of 1940. The north and the north Pacific regions together received 72.2 per cent of all loans, yet they contain only 26.4 per cent of the ejidatarios. On the other hand, the central region contains 50 per cent of the ejidatarios but received only 17.9 per cent of the loans. The Gulf and the south Pacific regions together contain 23.7 per cent of the ejidatarios, but they received only 9.9 per cent of the loans. Obviously, the bank is spending the major part of

TABLE 32

LOANS MADE BY THE BANCO EJIDAL IN 1944 IN RELATION TO THE TOTAL NUMBER OF EJIDATARIOS AS FOUND IN THE CENSUS OF 1940, BY REGIONS*

REGION	TOTAL AMOUNT OF LOANS IN 1944		TOTAL EJIDATARIOS IN CENSUS OF 1940		AVERAGE AMOUNT OF LOAN PER EJIDATARIO (PESOS)
	Pesos	Percentage of All Loans	No.	Per Cent	
North Pacific.	31,036,605	28.5	103,792	6.5	299.03
North.	47,443,732	43.7	318,115	19.9	149.14
Central.	19,419,342	17.9	800,599	50.0	24.26
Gulf.	3,773,176	3.5	209,705	13.1	17.99
South Pacific.	6,811,154	6.4	169,181	10.6	40.26
Total Mexico.	108,484,009	100.0	1,601,392	100.0	67.74

* Data compiled from the records of the Banco Nacional de Crédito Ejidal.

its available funds in the north and the north Pacific regions. The central region, where most of the population is concentrated, receives proportionately very little. This is shown clearly in the last two columns in Table 32.

The number of ejidatarios actually receiving credit from the bank gradually decreased from 390,154 during the peak year of 1937 to 216,300 in 1942. After that the number increased to 259,971 in 1944 and declined slightly to 240,939 in 1945 (Table 33). Thus the number of ejidatarios served by the bank has not increased much over the years, despite the increase in the volume of loans.

The reasons for the restriction in the number of ejidatarios with whom the bank operates are set forth by bank officials as follows: (1) the delinquent accounts have been numerous, especially prior to 1942, and (2) the costs of administration have been high.¹²

12. Banco Nacional de Crédito Ejidal, *op. cit.*, pp. 8, 9.

Administrative costs for the entire ten-year period have reached a total of 87,507,876.61 pesos, or 11.8 per cent of all loans made during the period. It will be noted from Table 34 that the administrative costs each year, with the exception of 1943, have exceeded the 8 per cent interest rate charged by the bank.

As an explanation of the admittedly high administrative costs throughout most of the period, the officials of the bank assert that there was an initial tendency to transform the Ejido Bank into a second Secretariat of Agriculture, undertaking all sorts of projects, such as creating agricultural experiment stations, making investigations

TABLE 33
NUMBER OF EJIDATARIOS ORGANIZED INTO CREDIT SOCIETIES AND NUMBER OF EJIDATARIOS ACTUALLY WORKING WITH THE BANCO EJIDAL, BY YEARS 1936-45*

Year	No. of Ejidatarios in Credit Societies	No. of Ejidatarios Actually Co-operating with the Ejido Bank
1936	303,729	257,963
1937	307,352	300,151
1938	308,729	254,979
1939.	389,241	263,409
1940	308,100	239,407
1941	401,017	220,075
1942	414,260	216,300
1943.	415,830	259,736
1944	434,491	259,971
1945	451,918	240,939

* Preliminary data from Banco Nacional de Crédito Ejidal.

regarding various phases of agriculture, and even entering the publishing business through sponsoring the preparation of works dealing with such topics as crops, credit, and agricultural insurance.¹³ Also, some of the loans were made almost on a relief basis, with little expectation of recovering them.

The present policy of the bank is to restrict its activities more nearly to regular banking practices and to limit the ejidos with which it operates to those that have a reasonably good chance of paying back the loans. This policy conflicts with another philosophy, which also has a substantial number of adherents in government circles. Briefly, the two conflicting philosophies are these:

First, there is the point of view adhered to by some of the more

13. *Ibid.*, p. 9.

ardent disciples of Lázaro Cárdenas that the Ejido Bank was created as an instrument and a device for facilitating social reforms growing out of the Revolution and that its results should not be measured solely in terms of the balance sheet. This point of view would hold that in measuring the success of the bank one should take into consideration the improvements made in the general welfare of the ejidatarios, the initiative and self-reliance being developed, and the improvements made in their standards and levels of living. It is argued that the bank, through its jurisdiction over credit and its organization into regional and local zones, is in a much better position than

TABLE 34
RELATION OF ADMINISTRATIVE COSTS OF THE BANCO
EJIDAL TO TOTAL LOANS, BY YEARS*

Year	Administrative Costs Pesos	Percentage of Total Loans
1936.	4,153,502 75	18.9
1937..	7,700,462 35	9.2
1938...	2,519,422 47	13.4
1939..	2,553,242.02	15.2
1940.	2,752,655 22	16.5
1941.	2,622,521.90	13.6
1942.	2,187,555.91	11.2
1943.	2,135,132 51	7.9
1944.	2,332,232.52	6.1
1945.	12,244,113.20	11.2
Total.	27,527,273 34	11.2

* Preliminary data from the records of the Banco Nacional de Crédito Ejidal.

any other agency to furnish leadership and guidance to the ejidatarios not only along lines of economic development but along lines of general social and cultural development as well. That attitude would look for repayment not necessarily in terms of the money loaned but in the gradual levelling upward of the general culture of the masses so that ultimately they could become responsible citizens. The fear is that the present policy of extending operations to the groups most able to repay the loans will eliminate those persons probably three-fourths of all the ejidatarios in the Republic who are most in need of assistance.

The second point of view and the one which tends to characterize the present administration of the bank is that it cannot continue loaning money to ejidatarios unless they pay their obligations when due. It is claimed that centers of production are gradually being set up

oped wherein the ejidatarios are able to meet their obligations promptly, not only because they want to do so, but because they produce. It is believed that gradually these producing areas can be enlarged to include a greater proportion of the ejidatarios. It is asserted that the large expenditures in a few areas is evidence that the ejidatarios in these areas have developed production techniques and responsibility which enable them to repay their loans. Bank officials hope gradually to include other areas in the program, but they argue that it would be foolish to lend money where there is no possibility for repayment.

EJIDO CREDIT SOCIETIES

The Ejido Bank does not extend any credit to private individuals. It makes loans only through ejido co-operative credit societies, organized expressly for this purpose. The credit society is a legal entity just as is the ejido, and it is coextensive with the ejido in that all duly qualified ejidatarios of a given ejido are eligible to become members; only ejidatarios may belong, and there is only one such society in any given ejido. The initiative in organizing a credit society usually rests with the ejido, whose local officers send a petition to the bank requesting the organization of such a society. In some cases the bank takes the initiative and sets out directly to organize the ejidatarios into societies. In either case thorough investigation is made by the bank to determine whether the majority of the ejidatarios really want the society organized and whether or not there is a reasonable chance that the ejidatarios would be able and willing to repay any loans made to them through such a society. In order to organize a credit society, at least 51 per cent of the ejidatarios of a given ejido, which must number no less than 15 ejidatarios, must sign as members on the date of organization. Thus, although the credit society is co-extensive with the ejido in the sense that the ejido is its sphere of influence, not all the ejidatarios need belong, since joining is a purely voluntary act. Once organized, the society is of indefinite duration but may be dissolved on approval of 80 per cent of its members. Individual members may resign, provided that all obligations to the society have been met and provided that they do not jeopardize the interests of the society by so doing. Members may be expelled by vote of the society for failure to live up to the provisions of the charter. New members may join, provided that they are ejidatarios in full possession of their rights and live in the ejido in question and provided that their entry is approved by majority vote of the members of the society.

As with the ejido in general, the ultimate authority of the local credit society rests with the general assembly. Decisions are made in this assembly by majority vote, each member representing one vote. The assembly passes on all major items of policy, the election or dismissal of administrative officers, the admission or expulsion of members, approves the annual plans of operation, applications for credit, and expenditure of funds. Active administration of the affairs of the society are intrusted to an administrative board, consisting of three members—usually the same three which serve as the ejido executive committee—one of whom serves as chairman, another as secretary, and the third as ordinary member. These three select one of their number to serve as *socio delegado* ("member-delegate"), a sort of manager for the society. He signs all documents in the name of the society, and it is through him that the bank deals with the society. The assembly also elects a vigilance committee, consisting of three members, usually the same three which serve as the vigilance committee for the ejido in general. Of these, one serves as chairman and another as secretary. It is the duty of this committee to check on the activities of the administrative board to make sure that they perform their functions in accordance with the recommendations of the general assembly and within the provisions of the constituting act. Usually the bank requires the chairman of the vigilance committee to sign with the member-delegate when any major transaction is involved. While the major objective of the credit society is to obtain credit for agricultural production, it often serves as a means of getting funds to promote community projects for the welfare of its members, such as organizing medical service, constructing school buildings, and providing water systems.

The societies are organized without capital of their own, and they operate initially with funds loaned to them by the bank. Members of the society carry joint responsibility. Jointly and severally they may be held responsible before the bank for the society's commitments, except for exemptions specified in the Agrarian Code. The bank has tended to interpret these responsibilities liberally, however, and has been lenient in the matter of exacting rigid liability.

For the purpose of building up a capital fund, the societies were originally bound by contract to deposit in the bank, as a "social fund," 5 per cent of the gross income for products which they harvested until such time as this fund should amount to twice the cost of the total annual operations. This fund belonged to the society and was never to be divided among its members. Its purpose was to pro-

vide working capital and even after liquidation of the society would be reserved for transfer to a new society which might be organized in the same ejido, or, in case no new society were formed within the period of one year, the amount would be transferred to a reserve account for agricultural insurance in the ejido.

Until 1942 it was assumed that this fund would remain intact and could not be depleted. At that time, however, two measures were adopted which permitted its use in current operations: (1) in all those societies having delinquent accounts with the bank, the social fund is to be applied automatically toward liquidating them; and (2) those societies having no delinquent accounts may use their social fund to help finance their current approved plan of operations, thus saving themselves payment of interest on this amount to the bank.¹⁴ These measures seem justified but had the effect of reducing the combined accumulated social fund for all societies from 5,552,534 pesos in 1941 to 3,807,584 pesos in 1942.¹⁵

TYPES OF FARM ORGANIZATION

There are two principal types of farm organization among the ejidos. These are what might be termed "individual" and "collective." These two types as differentiated here apply only to the crop lands, since, according to the Agrarian Code, all pasture lands, woodlands, and other noncrop lands in all ejidos are held and used in common and can never be divided among the individual ejidatarios unless opened up for cultivation. In this sense all ejidos use at least part of their lands in common. However, with reference to the crop land only, ordinarily a given ejido may be classified into one of the two types.¹⁶

The Agrarian Code stipulates that the president of the Republic shall determine the type of farm organization in the ejidos in accordance with the following principles (Art. 200):

I. Lands which constitute economic units requiring the joint efforts of all the ejidatarios for their cultivation should be worked on a collective basis.

II. Ejidos whose crops are intended for industrial uses and which constitute agricultural zones whose products are homogeneous within an industry shall also be worked on a collective basis. In this case the crops which should be grown shall be specified.

14. *Ibid.*, p. 15.

15. *Ibid.*, p. 16.

16. Actually, there are a few ejidos which have a mixed type of farm organization, with part of their lands farmed individually and part in common.

Collective organization may also be adopted in other ejidos whenever technical and economic studies show that in this way better living conditions can be obtained for the peasants, and its establishment is feasible.

In all other cases the ejidatarios of a given ejido have been more or less free to choose the type of farm organization they wanted to follow, although their decisions have no doubt been strongly influenced, in some instances, by the persuasions of the officials of the Ejido Bank, who could withhold credit unless the type of organization appeared feasible to them.

THE INDIVIDUAL EJIDO

An overwhelmingly large proportion of the ejidos are of the individual type. This means that each ejidatario is allotted a plot of farm

TABLE 35
EJIDOS OPERATING WITH THE BANCO EJIDAL IN 1944, CLASSIFIED
ACCORDING TO TYPE OF ORGANIZATION*

Region	TOTAL No. OF EJIDOS		TYPE OF ORGANIZATION					
			Individually Operated		Collectively Operated		Mixed	
	No	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
North Pacific	477	100	354	74.2	106	22.2	17	3.6
North	1,744	100	1,411	80.9	329	18.9	4	0.2
Central	2,045	100	1,965	96.1	74	3.6	6	0.3
Gulf	907	100	714	78.7	159	17.5	34	3.8
South Pacific	477	100	442	92.7	28	5.9	7	1.4
Total Mexico	5,650	100	4,886	86.5	696	12.3	68	1.2

* Data from Banco Nacional de Crédito Ejidal.

land (*parcela*) which he tills in his own way with the help of his family. These plots of crop land on the average for the entire country consist of 4.4 hectares. Of the 5,650 ejidos co-operating with the bank in 1944, there were 4,886, or 86.5 per cent, that were operating on an individual basis and 696, or 12.3 per cent, that were operating collectively. Sixty-eight (1.2 per cent) were using a mixed type (Table 35). The collective ejidos are found mostly in the northern areas and in the Gulf states. Only 3.6 per cent in the central region are operating collectively, and only 5.9 per cent in the south Pacific. The officials of the bank are firmly convinced that almost all the ejidos which operate collectively are co-operating with the bank. If this is true, it would mean that, of the 14,683 ejidos appearing in the census of 1940, only

about 5 per cent are operating collectively while 95 per cent operate on an individual basis.¹⁷

From the standpoint of financing the agricultural activities of these individually operated ejidos, there are a great many difficulties which present themselves. These stem from a variety of factors, among which are (1) the small size of the plots, (2) the relatively poor quality of the land, and (3) the culturally retarded status of the ejidatarios. The size of the holding is, in general, too small to be operated economically. With only 4.4 hectares of farm land, on the average, and much of this either too dry or too mountainous for efficient cultivation,¹⁸ there is little specialization of crops, little use of farm machinery, and lack of full employment on the part of the entrepreneur and his family. The general tendency in such cases is for the ejidatario to raise only subsistence crops, usually corn, whether the land is suited for this or not, in the fear of going hungry if he fails to grow what he eats. Ordinarily, his methods of production are backward, and, without a great deal of supervision, he is likely to produce little beyond his subsistence needs. Even with a great deal of supervision, it is questionable whether the return he could realize on his surplus products would be sufficient to compensate a credit agency for providing the necessary supervision. This is the problem with which the bank is confronted. In order to get a clear conception of the difficulties involved, we shall examine them with reference to the procedure of the bank.

First, in order for the society to receive credit from the bank, a plan of operations for the year must be prepared and approved. Ideally, these would be worked out, first, by each ejidatario for his own plot, then co-ordinated with those of the other members of his credit society, so as to present the bank with a composite plan in requesting specified funds for the society as a whole.

Since membership in the societies carries joint liability, it is quite important that each one know what the others request, so that this may be approved, modified, or rejected by the group in accordance with their knowledge of his needs, capacities, and resources. Actually, it does not work out that way. Many of the ejidatarios lack the experience and the cultural development for working out any such

17. Six hundred and ninety-six is slightly less than 5 per cent of the total number of ejidos, but we know that there are a few areas which operate on a collective basis that are not working with the Ejido Bank. These include the sugar-producing areas of El Mante in Tamaulipas and Zacatepec in the state of Morelos.

18. See chap i.

plan.¹⁹ When they meet to discuss the plan in a general assembly, jealousy and rivalry arise, with the result that, regardless of needs or ability to repay, the local officials are reluctant to assign less funds to one individual than to another for fear of unpleasant repercussions. This usually means that the local representative of the bank must consider each case individually, approve each plan separately, and make allotments of credit accordingly. This is almost an impossible task to perform adequately, since there are, on the average, 27 societies per zone and 67 ejidatarios in a society. This would give the local bank representative an average of about 1,809 ejidatarios to look after individually and many of these would be widely scattered.

A second major problem is concerned with the actual dispensing of funds after the plans of operation have been approved and the credit allotted. Again the ideal method would be for the bank to deal only with the member-delegate of a given society and let him distribute the funds among the members; but the bank has found that in most cases the member-delegate is not prepared to shoulder such responsibility. Sad experience has resulted from giving cash to the ejidatarios, since, like children, they often spend it for frivolities rather than for production purposes. For this reason the bank urges its local representatives to ascertain the needs of the ejidatarios and to grant loans to them in the form of supplies and equipment, such as seed, plows, and oxen, instead of giving them the cash. This procedure is very time consuming and costly, however, since the needs of each one must be considered and acted upon separately.

A third problem lies in the growing and marketing of the crop. Ordinarily, the plots are too small to warrant the purchase or use of modern farm machinery, and most of the ejidatarios probably are not even aware that such machinery exists. They use the same primitive methods that have been in use for centuries. In a few instances societies have purchased machinery jointly for the use of their members, but such cases are exceptional. In the last few years the bank has alleviated the machinery problem somewhat by establishing an agency known as the Department of Agricultural Services. About 16,000,000 pesos were invested in farm machinery from the United States, which was placed in conveniently located "machinery centers." The machinery is owned by the bank. Work requiring the use of machinery is then performed at the request of the ejidatarios who pay the bill on a cost basis. In 1944 there were a total of twenty-two such machinery centers distributed throughout the Republic. They appeared to be

19. See chap. xvii.

performing a valuable function, despite the existence of some criticism to the effect that the prices charged for doing the work were often too high for the ejidatario to pay, that some of the machinery was ill adapted for the work undertaken, and that some of the machinery depreciated very rapidly because of inadequate care.

Little uniformity exists in the products from the individual ejidos. Ordinarily, each ejidatario uses his own judgment as to when and what to plant and how to tend the crop. There are no uniform grades for products of a given area, and this makes for difficulty in marketing. The lack of warehouses is also a hindrance to any attempt at marketing the crops co-operatively or holding them for favorable prices. As a rule, the ejidatario lives at, or near, subsistence level, and he is eager to get a return for his crop as quickly as possible. He does not think through the economics of marketing but often bargains away whatever crop he thinks he will be able to spare long before it is ready for harvesting. The *acaparadores* ("monopolizers") have been a plague in rural Mexico for generations, and they are still going strong.

The Ejido Bank is struggling with the problem of convincing the ejidatario that his interests are being jeopardized by such practices and is trying to displace the *acaparador* by more efficient marketing procedures; but when each ejidatario is concerned only with his own little plot and bargains individually, he plays into the hands of the *acaparadores*.

A fourth problem, and one of the most serious, concerns the collecting of debts on loans. Theoretically, all members are supposed to bring their payments to the member-delegate and let him make the society's payments to the bank in a lump sum. It does not work out that way, however. Ejidatarios simply do not bring in their payments. In some cases, as indicated above, the ejidatario has already promised his crop, gets what little money is due him as soon as the crop is harvested, and spends it without considering the debt he owes. Other ejidatarios, sometimes through carelessness in tending their crops, sometimes through factors beyond their control, do not receive enough from their harvests to subsist upon and pay debts in addition. Still others are influenced by propaganda against the Ejido Bank, which not infrequently sweeps through the ejidos, to the effect that ejidatarios need not repay any debts to the bank, since these are government funds and should be given to them as a part of the fruits of the Revolution, just as was done in the case of the land. In one state which the author recently visited, the governor was elected to office

on the platform that he would see to it that the ejidatarios would not need to repay their loans. Thus the bank often finds itself under the necessity of trying to collect from each ejidatario individually, necessitating numerous calls, thus greatly augmenting administrative expenses. In many areas these expenses have become so high that operations have had to be suspended entirely.

The problems described above have tended to limit the operations which the bank feels it can safely undertake with the ejidos operating on an individual basis. This is emphasized by statistics showing that the three agencies of Torreón, Ciudad Obregón and Los Mochis, in which practically all the ejidos were operating on a collective basis, received 65.4 per cent of all funds loaned by the bank in 1943. These three agencies included only 11.5 per cent of all ejidatarios co-operating with the bank.

Not only is the financing of the production process very difficult under the system of individually operated ejidos, but the financing of special services for ejidatarios, such as medical service, recreation halls, and insurance, present even greater difficulties. The bank initiated projects of this type on many ejidos but found it virtually impossible to collect funds loaned for such purposes. One by one such attempts have been abandoned until at present, with a few important exceptions, virtually the only projects of this type now in existence are found in the collective ejidos.

THE COLLECTIVE EJIDO

While many of the features of the individual ejido date from pre-Conquest days, the collective ejido of Mexico, wherein even the farm land is tilled and used in common, is probably of more recent origin. The essential features may be described as follows:

1. The land, including farm land, is owned and worked jointly by the members of the ejido instead of being divided into plots and assigned to individuals.
2. The capital, whether in the form of credit from the bank or accumulated in some other form, is under the control of the ejido and is not dispensed to individual members.
3. The members place themselves at the disposal of the ejido to be used in the production process according to their respective abilities under the direction of the executive committee and the various work foremen.
4. The products realized from the enterprise belong to the society

and are marketed by it. The profits are distributed to its members in the form of money income or social benefits or both.

5. Although the main purpose of the society is that of production, it may also provide various types of social services for its members.

The credit society of the collective ejido is organized in the same manner as on the individual ejido, with the ultimate authority resting in the general assembly and the administrative leadership vested in an elected executive committee, which, in turn, designates one of its members to serve as manager (*socio delegado*). There is also the vigilance committee, with its duties of checking on procedure, hearing complaints, and reporting any irregularities which might be suspected. There are three major problems on the collective ejido that are not found on the individual ejido: how to distribute among its members the tasks that are to be done; how to compensate members for the various tasks performed; and on what basis to distribute the profits from the joint enterprise.

1. *The distribution of tasks.*—Since no one has any claim to any particular part of the land and since all share in the total enterprise, it is obvious that some sort of division of labor must be worked out among the members. The procedure normally followed is to have the general assembly appoint a work foreman, who serves as a sort of farm manager. His is probably the most important position within the entire organization, since to him is largely intrusted the working-out of detailed plans of operation, the assigning of daily tasks to individuals according to their respective skills or abilities, and the general supervision of all work.

If the ejido is large and the crops diverse, the foreman is usually given a staff of assistants, each of whom is in charge of a major enterprise or crop. These assistants, also, are usually chosen through election by the general assembly. On the larger collective ejidos, in addition to the foreman and his assistants, the assembly also elects personnel for the following positions: (1) Warehouse superintendent (*almacenista*). His duties are to keep on hand an adequate supply of machines, tools, and equipment needed for the work, such as plows, harrows, tractors, wagons, spare parts, lubricants, and feed for livestock. He provides storage space for seed and temporary storage for harvested crops waiting to be marketed. In short, he has charge of the warehouse, and he orders and dispenses materials and equipment as needed. (2) Livestock foreman (*corralero*). His duties are to supervise the care and feeding of livestock. Upon him rests the responsibility of making sure that the work animals are kept in good working condition

and are available when needed. (3) Mechanics (*mecánicos*). Usually several mechanics are elected to keep the machines and farm implements in good working order. (4) Inspectors (*vigilantes*). Several inspectors are elected, and they go from one job to another inspecting the work that is being done. (5) In ejidos where consumers' stores have been organized, a consumption chief (*jefe del consumo*) is elected, and he has charge of the co-operative store. Apart from these five definitely specified positions, the members perform whatever tasks are assigned to them by the work foreman. He usually meets with them every morning at some central spot, when he assigns the daily tasks and calls attention to any inadequacies in the previous day's activities.

2. *Compensation for tasks performed.*—If the ejidatarios were able to finance their living costs each year until after the harvesting of the crops, the problem of compensation for tasks performed would not arise, for they could then wait for their compensation until the profits were distributed at the end of the crop season; but ejidatarios are rarely able to finance themselves for any great length of time, and, therefore, the collective ejidos all practice some form of daily compensation for tasks performed. This is theoretically considered as an advance payment chargeable to the individual's share of the yearly profits rather than as a wage, although actually the individual in question frequently comes to regard it as a regular wage. Usually, in computing the compensation, the skill required for the performance of a given task is taken into account, and in some instances the quantity of work performed is taken into consideration as well. The pattern followed is similar to that used formerly by the hacendado, with an allowance of 1.50 pesos per day (in 1943) for tasks regarded as requiring only unskilled labor and proportionately more for tasks requiring specialized skills. In some instances, compensation ranges as high as 10.00 pesos or more per day for the more specialized tasks. Wherever feasible, tasks are allotted on a contract basis with a definite amount of compensation attached to a given unit of work. This puts a premium on industriousness and is far more satisfactory than the payment of a daily wage, although, unfortunately, only a small proportion of the tasks lend themselves to assignment on a contract basis.

3. *Distribution of profits.*—Profits from the enterprise, if any, are distributed to members on the basis of their relative contribution to the earning of them. The most common method is to distribute them on the basis of the amount of money received during the year as com-

compensation for tasks performed. This obviously takes into consideration not only the number of days worked but the compensation received as well. Those performing skilled tasks would thus receive both a higher rate of weekly compensation and a larger proportion of the profits than those performing unskilled tasks. A less widely used method of distributing profits takes into consideration only the number of days worked. Under this system a skilled worker and an unskilled worker receive an equal share in the profits, provided that they have worked an equal number of days, regardless of the nature of the tasks performed. In the first instance a premium is placed on the quality of the work performed, while in the second it is assumed that the difference in quality was adequately compensated for by the anticipatory payment. In either case it is clear that profits are not distributed according to need, as would be the case in a communistic scheme, but according to assumed relative contribution by the worker.

From the standpoint of financing the agricultural operations, the collective ejido has definite advantages over the individual type. One comprehensive plan can be worked out for the entire ejido, and the agent of the bank needs to contact only the member-delegate and the work foreman. This saves the time and expense of dealing with each ejidatario separately and makes possible a co-ordinated plan involving all the lands, equipment, and labor resources of the ejido.

From the standpoint of supervising credit, the collective society also has tremendous advantages over the individual. The society usually appoints one or more timekeepers, who, under the direction of the work foreman, make daily entries of the amount and type of work done by each ejidatario. Each type, by general agreement, is valued at a specified rate of compensation so that at the end of each week there is clear understanding as to how much is due each ejidatario. This amount may be dispensed by the bank at a given time and place with a minimum amount of expenditure of time and effort. There is no necessity for worrying as to whether the funds are spent on the production process or for frivolities, since, unless the work had been done, no payment would be made, assuming, of course, that adequate supervision and inspection had been carried out. In this regard the bank usually has an inspector who keeps in close touch with the foreman to insure that the plan agreed upon is being carried out.

The marketing of the product and the collection of debts are also greatly facilitated under the collective system.

The co-ordinated plan of work insures a more uniform product, which can be marketed at one time and place, thus insuring a much better price.

In the collection of debts the agent of the bank needs to deal with one person only, the member-delegate, and hence saves the time, expense, and energy involved in trying to collect from each and every ejidatario.

In addition to facilitating the financing of the production process, the collective ejido is also a more convenient avenue through which to finance special services for the benefit of its members. A fairly large number of these ejidos have provided complete medical service for their members and their families, including unlimited medical consultation, prescriptions, medicines, dental service, surgery, and hospitalization. This service is charged to the cost of production and deducted from the profits in a lump sum before making distributions to members. Similar procedure is often followed with reference to the construction of new school buildings. The general assembly merely votes to deduct a certain amount for a given project, and this saves the time and effort of trying to collect from individuals.

4. *Advantages and disadvantages of the collective ejido.*—From the foregoing, it appears that the collective ejido has certain definite advantages over the individual ejido. Some of these advantages are to be found in the relatively greater economies which reasonably large-scale production has over production on a very small scale. The various advantages may be summarized as follows:

1. The collective system lends itself to the use of adequate farm machinery, which would be uneconomical on small tracts.

2. It makes possible the use of the various vocational specialties of the ejidatarios, providing a place for such persons as managers, mechanics, carpenters, and tractor operators.

3. The rotation and specialization of crops is much more feasible under the collective system.

4. Supplementary enterprises can be developed, which provide employment during slack seasons, thus enabling fuller use of the labor resources.

5. Uniform quality in the product may be obtained under the collective system, whereas on individual plots there are likely to be as many qualities as there are plots.

6. Products may be withheld from the market for a time, thus giving greater bargaining power to obtain better prices.

7. More effective supervision can be provided under the collective system, since workers can be supervised in groups.

8. The collective system provides a more adequate basis for the care of widows and disabled persons by making it possible to assign them a share in the profits of the enterprise even though they may be unable to work.

9. It is easier to provide various types of social services under the collective system, since the cost can be deducted from the gross profits of the enterprise, thus saving the expense and effort of trying to collect contributions from each person individually.

10. Finally, the collective system tends to preserve the economic unity of the previously existing hacienda instead of breaking it up into small, detached, individually operated plots.

Admittedly, several of these alleged advantages are due more to the relatively larger size of the operating unit than to the collective system as such. Some of them would undoubtedly disappear if the comparison were between the collective system and relatively large individual holdings. Furthermore, some advantages would probably hold true only in a social environment in which the inhabitants were not experienced in the responsibilities of individual farm ownership. For example, detailed supervision and control would not be so necessary if each ejidatario had developed the initiative and understood the problems of agriculture which responsible proprietorship presupposes.

There are a number of difficulties which confront the collective ejido in Mexico. Two of these are so serious as to threaten its very existence.

First is the lack of adequately trained local leadership. As has been stated previously, the work foremen are usually elected by majority vote at the general assembly of ejidatarios. This is a most democratic procedure and certainly reflects ideals of pure democracy on the part of those who devised the rules; but it may be seriously questioned as to whether or not the ejidatarios have had sufficient experience and general cultural development to warrant their being intrusted with such crucial matters as the choosing of farm managers and work foremen by majority vote. These positions require abilities and technical skills that are not appreciated by the average ejidatario. Even though his intentions may be of the highest order, he often lacks the understanding and judgment to discern the qualities essential to efficient management. Furthermore, he is not likely to realize the importance of good management to the success of the enterprise. An extreme ex-

ample of this lack of appreciation of the managerial function is illustrated by an incident which was related to the author concerning a large sugar-cane-producing area. Before expropriation the hacendado employed the most efficient farm manager he could find and paid him a salary of \$10,000 in United States currency per year (equivalent to about 48,500 pesos), in addition to granting him certain perquisites, such as a house in which to live. The hacendado considered this salary one of the wisest investments he was making because on the efficiency of the manager depended to a great extent the success or failure of the entire enterprise. Yet after expropriation the ejidatarios displaced this man by another who had been serving as an oiler on a Diesel engine at a wage of 5 pesos (\$1.00) per day. They thought it ridiculous to pay such a large salary to anyone, and they insisted that the job be given to one of their own members. The result was inefficient management and greatly reduced production.

While there is no ruling against the employment of outside nonejidatarios as managers and while the Ejido Bank has the right to veto the election of incompetent managers, nevertheless the ejidatarios think it is unfair to bring in persons from the outside to fill key positions, and they object to paying high salaries. The bank, thus far, has chosen the policy of complying with their wishes in these matters, for in doing otherwise it might create the impression of wanting to break down the democratic process.

The second serious defect in the administration of the collective ejido is the lack of discipline. The managers and foremen have tenure only at the pleasure of the general assembly of ejidatarios. They can be removed from office by majority vote at any time. This makes them reluctant to attempt to enforce any measures that might be distasteful to the average ejidatario. On the contrary, they are likely to act in such a manner as to find favor in the eyes of the majority rather than in accordance with any absolute standards of efficiency. Each ejidatario has the right to share permanently in the use of the land and can be deprived of this right only by presidential decree. He might be expelled from the collective society, but in this case he would have to be given a plot that he could till for himself; and if there were many such cases it might upset the collective program. Therefore, so long as the ejidatario remains on the job, he receives his share of the returns regardless of how much time he loafs or idles away. There is no local authority that can effectively require him to put in a "reasonable" day's work, and it is difficult to require that he perform the task actually assigned to him if he decides to do something else instead. This

situation naturally makes for serious inefficiencies, which undermine productivity.

Additional, minor difficulties are also encountered in the collective system.

The ejidatario tends to regard the compensation advanced to him, for tasks performed, as a wage instead of an advance payment from his share of the ultimate profits. He is too often satisfied with merely earning the wage. He is slow to realize the connection between his own feeble efforts and the success of the entire enterprise.

Jealousy often arises between the efficient workers and the inefficient. The better workers feel that their own income is reduced by the carelessness and indolence of others. This makes for almost constant agitation on the part of some to break up the land into individual plots.

Finally, many of the ejidatarios long for a plot they can call their own and work according to their own desires. They feel that under the collective system they are still essentially wage hands working under the orders of a boss.

Thus there are advantages and disadvantages to the collective ejido as now operated. Generally speaking, the collective ejidos appear to be more prosperous than the individually operated ones; but the trend is toward the breaking-up of the collective ejido. Whether it will ultimately disappear will depend partly on the extent to which the collective ejido can clearly and consistently demonstrate superior efficiency and at the same time preserve sufficient individual freedom so that the ejidatario will feel that he is working for his own interests and not merely rendering obedience to another master.

tion with the growing of sugar cane. The henequen region of Yucatán is not financed by the Ejido Bank and is operated on a different basis from any other ejido program in the Republic. This operates through an agency known as the Henequeneros de Yucatán. Membership in this organization includes both ejidatarios and former hacendados. Because of the difficulty of financing a crop like henequen, which takes about seven years to mature, and because of the elaborate machinery needed for processing it, the ejidatarios were able to do very little with the lands which they received. The state governor finally persuaded the ex-hacendados and the ejidatarios to work together. The hacendados now supervise the production of henequen on the ejido lands and furnish the processing plants. The ejidatarios furnish the labor. The hacendados receive 52 per cent of the profits, the ejidatarios, 48 per cent. This seems to be a reasonably satisfactory arrangement for both parties.

Nearly all these collectivized regions were important commercialized and efficient farming areas before the ejido program took them over. The alleged reason for operating them now on a collective, instead of an individual, basis is to preserve the economic unity of the previously existing enterprises by working the land in rather large units, thus facilitating the use of farm machinery, specialization of crops, efficient use of irrigation systems, and more economical methods of financing the growing of crops and the marketing of the products.

Most of this chapter is devoted to a case description of the organization and functioning of the ejidos in the Laguna region. This region is chosen because it is the largest collective farming area in Mexico; because it receives about one-third of all funds loaned annually by the Ejido Bank; because, in a sense, it is the mother of the other collective farming areas of Mexico, in that their systems of organization have been patterned, with only minor variations, after that found in the Laguna region; and, finally, because it is believed that conditions in the Laguna region are fairly typical of those to be found in the other collectivized areas.

THE EXPROPRIATION OF LAND AND THE FORMATION OF THE EJIDOS

The Laguna region is situated about 200 miles west of the city of Monterrey and lies partly in the state of Coahuila and partly in Durango. It comprises about 1,500,000 hectares of land, of which 190,000 hectares are classified as irrigated and 1,310,000 as unimproved. Of the total amount, 468,386 hectares were given to ejidatarios, includ-

ing 147,710 hectares of irrigated land. Thus the ejidatarios received 31.2 per cent of the total land in the area and 77.7 per cent of the irrigated land.

There are 38,101 ejidatarios in the area, and they, together with their families, constitute a total ejido population of about 118,500 individuals. Torreón, with a population of 75,796, according to the census of 1940, is the central city, and around it the economic and social life of the region revolves. It is one of the most modern and progressive cities in Mexico.

The redistribution of land in the region resulted from a presidential decree issued on October 6, 1936, and was actually carried out during the forty-five-day period beginning October 17 of that same year.¹ Prior to this time there had been a great deal of labor agitation in the area. This began as early as the period immediately following the decree of 1915, which promised land to peasants. It gathered momentum following the adoption of the Constitution of 1917. It will be recalled that Article 123 of the Constitution granted both farm and city laborers the right to organize and to strike. As a result of this measure, labor unions began to form in the various localities of the region, but, instead of pursuing a policy of merely demanding improvement in their working conditions as wage-earners, they strove to obtain land in accordance with the avowed ideals of the Revolution. The Agrarian Regulatory Law of 1922 specifically prescribed that only localities having political status (*categoría política*) should have the right to petition for land. Ordinarily, political status was achieved only after the village had attained considerable size. This led to attempts on the part of laborers to locate in clusters of sufficient size to request political status, and to attempts on the part of the hacendados to prevent the formation of permanent groups large enough to qualify for such status. In a few instances complaints were made to the effect that landowners burned to the ground the huts of villagers who refused to scatter into small clusters or to move off the landowner's property. Little was done to mitigate these conflicts, and with the passing of the years they gradually became more intense.

In 1930 the hacendados became seriously worried over the question of possible expropriation, and they drew up a plan for solving the agrarian problem in the district. This plan called for the consideration

1. Much of the material in the next few pages is taken from *La Comarca lagunera*, a study made of the Laguna region in 1940 by the Liga de Agrónomos Socialistas (Mexico City, 1940). This is supplemented by data gathered by the author on two personal visits to the area.

of the Laguna region as a special district and the taking immediately of an agrarian census to determine the number of peasants eligible to receive land. Once this was determined, a special ejido district would be created from the unused lands of the area, and persons entitled to receive land would be placed as ejidatarios on these unused lands. In case these lands were not sufficient for the minimum needs, one or two haciendas would be purchased for this purpose by the hacendados of the area, each paying an amount proportionate to the assessed value of his own property. Once these ejido districts were allotted, the agrarian needs of the Laguna region were to be declared solved, all pending petitions for land would be nullified, and no new applications would be accepted. The plan was submitted to the federal government and on November 15, 1934, was officially accepted and put into effect by President Abelardo Rodríguez. Instead of solving the agrarian problem in the region, this measure appeared to have aggravated it. It was claimed that the lands granted were of poor quality, that intimidation was used to prevent laborers from enrolling in the agrarian census, and that scarcely a fractional part of those deserving lands received them.

A series of strikes broke out, and hacendados imported strikebreakers from adjoining states and from the Central Mesa at considerably higher wages than were received by local laborers. A strike in August, 1936, became so serious that President Cárdenas summoned the strike committee to Mexico City. He promised to apply the agrarian laws to the region if the strike were immediately called off. The laborers promptly accepted and returned to work. Word reached the hacendados concerning this agreement, and they began a furious manipulation of political pressure in the hope of persuading the president to rescind this decision. The decree authorizing expropriation was signed by Cárdenas on October 6, 1936, at the very moment when he knew that a delegation of hacendados was in his outer office waiting for a chance to persuade him to change his decision.² The decree stated that the ejido districts established previously had utterly failed to solve the agrarian problems; hence it was necessary to invoke the provisions of the current Agrarian Code and apply them to the Laguna region. It was stated that hacendados would be reimbursed for whatever they had contributed toward the establishing of the ejido districts now declared defunct. The decree also contained the following provisions:

2. This was reported to the author by one of the former hacendados who was waiting to see Cárdenas when the decree was signed.

1. That each hacendado would be permitted to retain 150 hectares of irrigable land and could choose the land he wished to retain.

2. That the National Commission of Irrigation would pay the hacendados for whatever irrigation wells were included with the expropriated land.

3. That land, in excess of the inaffectable 150 hectares, which was not needed for redistribution to villagers living within a radius of 7 kilometers, could be subdivided and sold by the hacendado.

4. That the National Ejido Bank would furnish credit in sufficient quantity so that commercial production need not be seriously interrupted.

5. The concluding paragraph urged the hacendados to co-operate in the carrying-out of the decree expropriating their lands. This reads as follows:

I deem it advisable to call the attention of the present owners of the land to the fact that, in accordance with the terms of this decree, the distribution of land will be irrevocably carried out and the agricultural and industrial production of the Laguna Region will be organized; therefore, rather than offer resistance to the development of the program which will solve those problems in their entirety, it is to their own interest, as well as to that of the country, to co-operate with the authorities, and especially with the agrarian authorities, for the fulfilment of the provisions of this decree, which is directed towards obtaining the economic development of the region, without impairing the rights which the law guarantees the workers.³

Soon after the decree was issued, some three hundred agronomists and agricultural engineers from all parts of the country were called into the Laguna region, under the direction of the Agrarian Department, to undertake the work of an agrarian census, to survey boundaries, and to complete all the preliminary work necessary for the redistribution of land. Cárdenas himself arrived early in November and remained in the area to supervise the work until it was practically finished, early in the following month. During the short space of forty-five days, 447,516 hectares of land had been expropriated and distributed to 296 ejidos, including a total of 34,743 ejidatarios. In the month of May of the following year (1937) fifteen additional ejidos were organized in the region, bringing the total to 311 ejidos with 38,101 ejidatarios in possession of 468,386 hectares of land. A number of additional ejidos have been organized in the area since that time.

Very little planning was done in preparation for this hasty, gigantic, and revolutionary task. For the most part, it was generally

3. Quoted in Liga de Agrónomos Socialistas, *op. cit.*, p. 48.

assumed that the Agrarian Code could be followed in the redistribution of land and that most of the planning would relate to the organization of the ejidos after redistribution. As a result of the lack of adaptation of the procedures to this particular region, however, and because of the haste with which the program was carried out, there are several problems which have confronted the area since the beginning of the agrarian program and which, to some extent, still interfere with the successful operations of the ejidos.

1. The agrarian census included as eligible to receive land not only the resident peons but many seasonal workers as well. The regular resident peons included between 15,000 and 16,000 workers. There were about 10,000 other workers within the region that went from one hacienda to another as working conditions required, and there were about 5,000 who came regularly from outside the district to work during the cotton-picking season from July to September. In addition, the hacendados had imported from other states about 10,000 workers as strikebreakers, and most of these remained in the area.⁴ All these groups were included in the agrarian census, making a total of about 40,000 persons who were declared eligible recipients of land. As we have already noted, the actual recipients numbered 38,101, and this was a much greater number than the land had regularly supported previously. In some ejidos the number of recipients to be accommodated resulted in an actual allotment per person of much less than 4 hectares of irrigated land as stipulated in the Agrarian Code. Thus, not only was the organization of the economy altered, but at the same time the number of persons to be supported regularly was increased.

2. Although numerous agricultural specialists were called into the area for the purpose of dividing the haciendas and determining the boundaries of the ejidos, the work was carried on so rapidly that the boundary lines in many cases were inadequately determined. In some instances the designated boundaries between ejidos overlapped. In other cases the boundaries of an ejido extended over into the 150 hectares supposedly remaining to the hacendado; or the boundaries of the inalienable property of the hacendado overlapped onto the land designated as belonging to the neighboring ejido. This inadequate allocation of boundary lines resulted in many long-drawn-out and bitter disputes.

3. The area of irrigable land in the Laguna region has varied considerably over the years, depending on the amount of water carried

4. *Ibid.*, p. 62.

in the Nazas and Aguanabal rivers. Much of the land was classified on the books as irrigable, even though it was not irrigated except in seasons of maximum flow. Between 1926 and 1939 the amount of land that could be irrigated was, on the average, about 126,000 hectares. It is estimated that, even when the El Palmito Dam is completed, the average amount of land that can be irrigated will not exceed 160,000 hectares.⁵ Yet the Agrarian Department apparently ignored these records and granted 153,000 hectares to ejidatarios as irrigated land and presumably left 71,000 hectares in private hands. The result was that many of the ejidos received land that could not be irrigated, and they are still without adequate water to produce crops regularly.

4. According to the Agrarian Code, only those properties located within a radius of 7 kilometers from a given petitioning village are subject to expropriation for the benefit of the inhabitants of that particular village. In the Laguna region this ruling resulted in a very uneven distribution of land to ejidatarios, with consequent dissatisfaction and jealousy among them. One village might contain a large number of eligible recipients, in relation to the land available within a radius of 7 kilometers and hence receive only tiny fractions of land per ejidatario, while a neighboring village might contain few eligible recipients, in relation to the land available, and therefore receive maximum allotments per individual. The rules prevented the shifting of individuals from the former village to the latter. In some cases eligible individuals from a given village had to be excluded entirely from the benefit of the redistribution program for lack of available land. This situation is reflected to some extent in the subsequent relative success of ejidos. Some are prosperous and receive substantial profits every year, while others are constantly in debt and receive little more income than they did as peons.

5. The hacendado was permitted to choose the location of the 150 hectares he wished to retain. This invariably resulted in his choosing the area containing his houses, barns, warehouses, and other buildings, as well as the central network of roads and communication lines which connected the hacienda internally and with the outside world. Sometimes he chose irregularly shaped, narrow strips extending outward from his buildings, in order to retain what he considered to be

5. *Ibid.*, p. 478. A large irrigation dam known as El Palmito is now being finished to equalize the flow of water in the area. This will also increase somewhat the amount of land that can be irrigated. Some of the land is irrigated by means of wells and pumping systems.

the most productive lands. Thus he was left with all his buildings and 150 hectares of his most accessible, if not most productive, land. In other words, the hub or heart of the hacienda was detached, and the remaining parts were given to the ejidatarios. The ejido thus was formed from fractionated appendages detached from the central core. The land left to the hacendado was topheavy with buildings, equipment, and communication lines. Many ejidatarios immediately found themselves under the necessity of dealing with the hacendado for warehouse space and for permission to cross his property in order to reach the market and even of soliciting drinking water from him.⁶ Quite understandably, the hacendado was in no mood to satisfy pleasantly all these requests. Furthermore, the irrigation canals usually crossed the property retained by the hacendado and frequently the systems of water control were located there. Where irrigation was carried on by means of wells and pumps, hacendados often chose land containing the greatest number of wells or the best ones. In some cases, however, wells and canals were allotted to ejidos even though located within the land retained by the hacendado. This necessitated "trespassing" on the part of the ejidatarios in order to make use of irrigation rights. These factors all made for social conflict and for economic inefficiency.

The haciendas in this region had been built up as efficient economic units centralized in the area containing the main buildings. Expropriation broke economic unity by detaching the central core and leaving the periphery decentralized. Over a long period of time adequate adjustments will probably be worked out, but these will involve a large amount of conflict and economic waste. A wiser policy might have resulted in the expropriation of entire haciendas with their buildings, roads, and water systems all intact. This would have provided the ejido with an efficiently organized unit and would have provided a firm foundation for successful operation. The hacendados might have been compensated in cash for the value of the property that they were legally authorized to retain; or a block of haciendas could have been retained for dividing into 150-hectare tracts among the hacendados. In the latter case the hacendados could have been given sufficient funds to construct buildings adequate for the reduced holding in compensation for the buildings expropriated. The only apparent reason for not doing this is that the government tried to follow strictly the legal provisions of the Agrarian Code. It was believed that this procedure would arouse less resistance from

6. *Ibid.*, pp. 61 ff.

the hacendados than improvised rules designed to fit the particular needs of the occasion.

6. The expropriation of entire haciendas would have precluded another source of conflict that was inevitable under the procedure actually followed. At the present time the ex-hacendados with their 150 hectares of land, topheavy with buildings and equipment, are distributed throughout the area, interspersed among the ejidos. In many instances the ejidatarios occupy the same houses they lived in as peons, immediately adjoining the principal hacienda buildings. In such cases the ex-hacendado and his family cannot enter or leave his property without rubbing shoulders with his former peons. Some of these he remembers as instigators of labor troubles and signers of the original petition which resulted in the expropriation of his property. He resents very much seeing them constantly around the premises, living out of what he terms his "hard-earned property," using the irrigation wells which "he dug" and the canals which "he constructed." He regards them as lazy, incompetent, and incapable of making adequate use of the land he so badly needs. The ejidatarios, on the other hand, regard the hacendado as one who accumulated his property through exploitation of peon labor, and they feel that he should not have been allowed to retain the buildings and the choice land. Some are glad of the opportunity to annoy him a bit by doing things they know meet with his disapproval. This close juxtaposition of ex-hacendados and ejidatarios consequently results in conflicts that probably will not completely subside for several generations. This might have been avoided by segregating one group from the other.

From the foregoing, we may conclude that the ejidos in the Laguna region got off to a poor start because inadequate social and economic planning preceded their organization. No blueprint had been prepared for the reorganization of this important area, in spite of the fact that the government had been redistributing land since 1915 (twenty-one years) and despite the fact that a great deal of data was available on this area that would have provided a solid basis for such a blueprint.⁷ The following factors might well have been taken into account in carrying out such a revolutionary program: (1) the maximum and minimum area of land that could be efficiently operated on a collective basis under the conditions peculiar to this area; (2) the availability and regularity of the water sup-

7. The Laguna region was one of the most studied in the entire country (*ibid.*, p. 478).

ply for irrigation purposes; (3) the arrangement of the land with reference to irrigation systems, roads, and farm buildings; (4) the maximum and minimum number of individuals necessary to operate a collective enterprise efficiently, taking into account the needs for farm machinery, warehouses, and the necessary division of labor; (5) the location and arrangement of the ejido communities themselves with reference to communication facilities, accessibility to farm lands, and the possibility for developing local institutions.

Little attention was given to these factors, however, and, for the most part, the land was expropriated and redistributed in a simple mechanical fashion according to the following formula: "The number of eligible individuals within a given village divided into the number of hectares subject to expropriation within a radius of seven kilometers gives the number of hectares per person." Only in isolated instances was there any attempt to vary the formula according to the quality of the land, the available water supply, or the number of individuals to be accommodated. As a result, there was no uniformity in the size of the communities, neither in the amount and type of land at the disposal of individuals nor in the equipment they could hope to acquire and use in their operations.

THE ORGANIZATION AND FUNCTIONING OF THE COLLECTIVE EJIDOS

The Ejido Bank proceeded to organize each ejido into a collective credit society according to the procedure explained in the previous chapter. These societies were then grouped into zones for convenient supervision by the bank. At first there were 24 zones, but later these were reduced to 17, and at the present time there are only 15.

The number of societies in each zone varies from 12 in the smallest to 26 in the largest, with an average of 19. The number of ejidatarios per zone varies from 1,057 to 2,989, with an average of 2,048. The regional agency of the bank is located in Torreón with an office in each zone. The personnel of the local office usually includes a local representative, several assistants, and several farm inspectors. As has been mentioned previously, the bank performs a supervisory and technical function as well as the usual banking function. At Torreón the following technical divisions are administratively organized in the bank: (1) the Agricultural Division, which works on problems having to do with types of crops, plant diseases, fertilizers, experimental plots, and cattle production; (2) the Organization Division, whose function is to organize and supervise societies; (3) the Eco-

nomie Studies Division, which is responsible for making studies of production and marketing; and (4) the Rural Engineering Division, which is concerned with problems of irrigation and farm machinery.

Most of these divisions have field representatives who visit the various ejidos and are available for consultation and advice. Within a short time after its organization, the bank found itself with a total number of 542 employees in the Laguna region—149 were in the central offices at Torreón, while 393 were in the various zones of the region.

Much of this personnel was recruited hastily from willing workers who had had no training or experience in the type of work they were expected to do. Some had served as employees for the hacendados and had carried over into their new jobs attitudes of sympathy for their former masters and skepticism regarding the justification and possible success of the ejido program. Some could not resist the opportunity of using their positions to achieve personal financial gain for themselves at the expense of the ignorant ejidatarios whom they were appointed to serve. Charges have been made by ejidatarios that certain Ejido Bank officials have exploited them. Such a charge is reported in the August, 1943, issue of the magazine *Tiempo*.⁸ In the same issue were reported the resignations of the bank manager at Torreón and several of his assistants, allegedly because of the betrayal of confidence placed in them. A considerable number of ejidos have severed relations with the Ejido Bank, claiming that they prefer to pay a higher rate of interest to private banks than to have their activities regimented by the Ejido Bank; these ejidos in 1945 included a total of approximately 5,000 ejidatarios, or 13 per cent of the ejidatarios in the entire area. Fortunately, there have been many government employees of the Ejido Bank who have devoted themselves wholeheartedly to the task of developing the program and helping the ejidatarios to develop initiative and self-reliance.

One of the first problems facing the Ejido Bank was to secure farm machinery, work animals, and warehouses for the ejidos. These items were not expropriated; in some cases they were purchased from the hacendados and in other cases from dealers. The requirements for equipment and machinery were enormous. An inventory taken in 1939 indicated that the agricultural machinery belonging to the ejidos amounted to an estimated value of 4,718,382 pesos. The estimated value of the mules owned by the ejidos was 3,915,580 pesos.

8. Pp. 14 and 15.

An example of the amount and types of equipment used is the following partial inventory taken as of 1939:

Items	Number
Tractors	417
Mules	21,731
Combine thrashers	126
Other thrashers	33
German plows	1,352
Disk plows	862
Harrows (for tractors)	339
Harrows (for mules)	1,018
Planters (for mules)	4,268
Planters (for tractors)	69
Balers	115
Cultivators	12,586
Scrapers	2,148
Buses	136

Each ejido has its own tools, equipment, and machinery according to its needs and ability to purchase. Some have plenty of equipment, and others have very little. The bank has recently established a department with machinery and equipment of its own and is prepared to do contract work for those ejidos which have not the resources for purchasing machinery.

Each ejido is an autonomous unit and devises its own program with the assistance of the local representative of the bank. Each elects its work foreman and his assistants, who co-operate closely with the member-delegate⁹ and the local representative of the bank. The work foreman meets with the ejidatarios each morning, assigns the various tasks for the day, and reports any problems related to the previous day's work. He is perhaps the most important person in the entire setup, since he decides what work is to be done, how it is to be done, and who is to do it. In other words, he is the head foreman and supervisor of the enterprise. He is selected by majority vote of the ejidatarios and hence is not always the most competent person available for the job. In some cases the ejidatarios may vote for the one with the most pleasing personality or the one with the strongest political influence rather than for the one best prepared technically for the job.

As pointed out in the preceding chapter, lack of discipline among the membership is one of the most serious problems confronting the collective ejidos. This is true also of the Laguna region. Even though

9. See chap. ix.

a competent work foreman may be chosen, he has little authority to enforce his program and must rely largely on his own powers of persuasion. He can be removed from office at any time by vote of the general assembly. It is true that the bank has authority to enforce certain regulations through the withholding of credit, but generally it has preferred to follow a policy of friendly persuasion rather than to impose sanctions. Actually, therefore, as one important group of investigators concluded, "nobody does anything against his will."¹⁰

The farm-management problem is much more complicated on the collective ejido than on the private farm. The operator of a private farm may hire a foreman and select carefully the employees best suited for his work. He may exact reasonably high standards of efficiency. The moment his employees show manifestations of inefficiency he can displace them. On the other hand, the ejidatarios, who are the laborers on the collective ejido, were not selected because of their adaptability for the work or for their efficiency but rather because of their need for land. They have permanent rights to share in the enterprise and cannot be displaced except for reasons specified in the Agrarian Code. Many of them tend to regard the anticipatory payment as a wage or salary that will continue whether conscientious effort is put forth or not. Foremen are chosen by election from among the ejidatarios; persons are not brought in from the outside to fill this position even when no competent persons are available within the ejido. Foremen can be displaced at any time by vote of the assembly. Hence they are more likely to act in such a manner as to find favor in the eyes of the majority of the group than in accordance with absolute standards of efficiency. In other words, the farm managers on the ejido run the risk of being displaced for exactly the same reasons that would result in promotions to managers on private farms.

This does not mean that none of the foremen are competent or that they do not exact high standards of efficiency. The ejidos of the Laguna region vary greatly as to the efficiency with which they operate. Some of them appear to be working very efficiently. A great deal depends on the personal characters of the foremen chosen. One responsible person told the author that he had visited two specific ejidos in the region at three different times. These ejidos were both taken from the same hacienda and have equally good land and about the same supply of water. They are located side by side; yet one has

10. Liga de Agrónomos Socialistas, *op. cit.*, p. 226. There is an attempt to emphasize democratic procedures throughout. It would appear that this is in direct contrast with the procedures followed on the collective farms of Soviet Russia.

always been one of the three or four most productive ejidos in the region, while the other barely makes expenses. He attributes the difference to the personal characteristics of the work foremen. The foreman on the successful ejido is a large, energetic, natural leader who insists that his instructions be carried out. His physical stature alone would make ejidatarios hesitate to disobey him, yet his personality is such that he is not displaced at elections. The foreman on the unsuccessful ejido is a small, quiet, unassuming man who may understand farming but who has not persuasive powers or the personality to radiate enthusiasm and inspire discipline among the ejidatarios.

As a result of carelessness on the part of the work foremen or lack of responsibility on the part of the ejidatarios, some of the ejido lands show signs of neglect. The author visited one ejido which was adjoining the property of an ex-hacendado from whom the ejido lands had been taken. Although there were no fences separating the two properties, one could almost detect the dividing line by the difference in the care which had been taken of the lands. The irrigation ditches of the ex-hacendado were clean and free from weeds and grass, while those of the ejido had practically grown up with grass, which tended to absorb a great deal of the moisture, leaving proportionately less for the crops. The crops of the ex-hacendado appeared to be of uniform quality as to height and vitality. Those of the ejido were spotty and uneven in quality, suggesting that sufficient care had not been taken in distributing the water equally over the land. Although this was a time when the crops needed serious attention, only a few of the ejidatarios were on the job at the time of the visit. The others either were away working for private operators in the vicinity, with the object of acquiring a little money on the side, or were "resting." The ex-hacendado told the author that the ejidatarios had offered to rent part of their land to him even though this is against the law. He said he needed more land but that he objected to renting land which had practically been "stolen" from him. For this reason he was renting land from another ejido which had not been taken from his own property.

The foregoing observations, of course, do not apply to all ejidos; they probably apply only to a small number of them. As stated previously, the efficiency of the ejidos as farming units varies greatly from one ejido to another.

The local personnel of the Ejido Bank some time ago drew up a set of rules for regulating the work of the ejidatarios in the area. These rules were submitted to all the ejidos for their consideration,

but only a few adopted them. Because of their seeming importance to the success of the program, a few of the most important are given:

1. All members shall perform daily the work assigned to them by the foreman. Disobedience of such orders shall be punishable by sanctions, varying from suspension for three days of the right to work to definite exclusion from the society in case of obstinate disobedience.

2. All members shall report for work at seven o'clock in the morning, and they shall lose the right to work if they arrive after the foreman has finished distributing the work.

3. All members shall perform the work assigned to them with the greatest possible efficiency. The foreman has the right to refuse to accept the work when in his judgment it has not been done properly, the member thereby losing the right to receive the anticipatory payment for that work unless it be finished to the satisfaction of the foreman.

4. For the sake of discipline and order in the performance of the work, the workers must not leave the place where they have been working until the foreman or his assistant has checked and approved the work done. Lack of compliance with this regulation shall cause the loss of the right to receive anticipatory payments.

5. It is the duty of the members of the society to perform all the work pertaining to the cultivation of the ejido lands, and they are forbidden to work outside of the ejido when there is need of their work in the ejido. Disobedience of this regulation shall entail expulsion from the society for a period up to three months.¹¹

The above rules do not seem to be unduly rigorous, yet in only a few ejidos have they been adopted. Commenting on each of them it may be said: (1) That it is almost impossible for the work foreman or any of the other officers to impose sanctions on ejidatarios who disobey orders. This is largely because the officers know that they hold office only at the pleasure of the members and that they must keep at least one eye on the possibilities for re-election; hence they try to avoid unpleasant experiences. (2) Seven o'clock is the usual hour appointed for beginning work in all the ejidos, yet both ejidatarios and bank officials admit that some begin work as late as eight or nine o'clock. Work usually ceases at two o'clock in the afternoon. Thus even the most conscientious seldom work more than seven hours a day; many of them do not work more than four or five, as compared to eight or ten hours previously required by the hacendados. A study of the productivity of labor in ten representative societies of the area in 1939 by the Liga de Agrónomos Socialistas concluded that, on the average, there had been a decline of 22 per cent in productivity of labor since expropriation. This is compared with an average decline

11. *Ibid.*, pp. 211, 212.

of 15 per cent on the privately owned farms in the same area. In one society the decline was as great as 35 per cent since expropriation. In only one society of the ten studied was the productivity of labor equal to that of the previously existing hacienda.¹² (3) Owing to factors mentioned above, the work foremen are usually liberal in accepting work performed. Seldom is compensation denied on account of unsatisfactory work. (4) It is the accepted practice for the foreman to check on the tasks that have been completed, although the worker often does not remain on the job until after inspection. (5) The ruling that ejidatarios must not accept work off the ejido at a time when the ejido is badly in need of their services seems to be a very sensible one; yet several employees of the bank and several ejidatarios, as well, told the writer that occasionally the ejidatarios create serious problems for the society by accepting work from private individuals for a higher wage at the very time when their work is most needed on their own ejidos. Many of the ejidatarios work regularly for others in the afternoons whether or not there are urgent tasks to be done on their own ejidos. Several cases were brought to the attention of the author wherein ejidatarios were renting a part of their lands to ex-hacendados and working part-time as peons for a wage on their own lands. This is strictly against the law as stated in the Agrarian Code, but evidently such cases are not always reported to the proper officials, or else the latter sometimes find it to their own advantage to ignore the law.¹³

As has been stated, work is done on a collective basis with anticipatory weekly payments made to individuals on the basis of daily tasks performed. In 1943 the rate of allowance was 1.50 pesos per day for ordinary labor, with greater amounts for skilled labor. Wherever possible, tasks are graded as to the time and skill necessary for their performance, and individuals are compensated on a contract basis. This plan is much more satisfactory for the better workers, some of whom are critical of the collective system, claiming that under it the lazy and the indifferent share in the rewards made possible by the work of the industrious. It is claimed by some ejidatarios that, even though profits are distributed among the individuals on the basis of number of days worked, the inefficient and the indolent prevent the society from obtaining profits for distribution, or at least greatly limit profits through their carelessness and inefficiency. There

12. *Ibid.*, p. 210.

13. The author visited one ejido which was renting land to an ex-hacendado. He talked to both the ejidatarios and the ex-hacendado about it.

is frequent agitation for breaking up the collective holdings into individual plots. The Ejido Bank is giving serious attention to possible combinations of the individual and the collective forms of operation.

THE SUCCESS OF THE COLLECTIVE EJIDOS

Two important questions naturally arise in the mind of the reader concerning the Laguna region. First, has the shift to the ejido system resulted in a decline in agricultural production; and, second, are the ejidatarios any better off now than they were as peons? Such data as are available will be presented on these two questions in order.

AGRICULTURAL PRODUCTION

Production figures for cotton, the principal crop, have been recorded since 1931 by the Secretariat of Agriculture through a depart-

TABLE 36
COTTON PRODUCTION IN THE LAGUNA REGION, 1931-43*

Year	Area Planted (Hectares)	Production (Bales)	Yield (Bales per Hectare)
1931.....	68,870	141,446	2.05
1932.....	43,231	59,340	1.37
1933.....	78,800	175,853	2.23
1934.....	60,751	132,350	2.18
1935.....	66,468	146,412	2.20
1936.....	133,100	173,000	1.30
1937.....	120,000	140,000	1.17
1938.....	92,670	147,000	1.59
1939.....	85,300	133,000	1.56
1940.....	73,908	105,016	1.42
1941.....	105,984	120,846	1.14
1942.....	120,000	203,931	1.70
1943.....	135,037	262,298	1.94

* Data from Junta Central de Algodón, Dirección de Economía Rural.

ment known as the Junta de Revisión y Arbitraje del Algodón. This department is charged with the granting of permits for the planting of cotton and with the inspection of the product when harvested. Its figures, therefore, should be reasonably reliable. The trend in production from 1931 to 1943 is shown in Table 36.

Expropriation took place in the fall of 1936. From the last column, which indicates yields per hectare, it appears that 1936 marks the beginning of consistently lower yields. In only one year prior to 1936 did the yield per hectare fall below 2 bales, while every year since that time the yield has remained below that level. It should also be

noted that the area planted to cotton has been much greater in recent years than it was prior to expropriation. The lower yields in general may bear some relation to the additional land brought into production.

A comparison of the production per hectare on the ejidos and the private holdings since 1936 is given in Table 37. Production per hectare on the ejidos appears to be definitely below that on the private holdings every year since expropriation. In four of the seven years, production on the private holdings amounted to more than 2 bales per hectare, while the highest yield attained in any year on the ejidos was 1.5 bales per hectare in 1943. Furthermore, the area devoted to

TABLE 37
COMPARISON OF COTTON PRODUCTION ON PRIVATE HOLDINGS
AND ON EJIDOS IN THE LAGUNA REGION, 1937-43*

YEAR	PRIVATE HOLDINGS		EJIDOS	
	Area Planted (Hectares)	Yield (Bales per Hectare)	Area Planted (Hectares)	Yield (Bales per Hectare)
1937.....	29,056	1.90	90,944	0.93
1938.....	26,198	2.02	66,472	1.41
1939.....	28,971	2.35	56,329	1.15
1940.....	23,319	2.14	50,589	1.09
1941.....	55,984	1.27	50,000	1.00
1942.....	70,000	1.99	50,000	1.30
1943.....	71,881	2.32	63,156	1.51

* Data from Junta Central de Algodón, Dirección de Economía Rural.

cotton on the private holdings greatly expanded each year from 1940 to 1943. Acreage on ejidos declined from 1936 to 1940, then remained constant until 1943, when it was expanded. Thus it would appear that, in so far as cotton production is concerned, the ejido production per hectare has been definitely below that on private holdings.

As previously stated, the ejidos vary widely in the relative success which they have obtained. A few have realized substantial net profits every year, even after deducting anticipatory allowances, while others have gone further into debt each year. The author asked the head of the Credit Department of the Ejido Bank in Torreón to classify the 331 ejidos into three broad groups. Group I was to include those societies which consistently made a profit, however large or small this might be. In Group II were to be placed those societies which made slight profits one year but went behind another and, on

the average, barely broke even. Group III was to include those societies which could be regarded as failures economically. His classification of the societies is shown in the accompanying tabulation.

Group	No. of Societies	Per Cent
I (made profit).....	80	24.2
II (broke even).....	226	68.3
III (failures).....	25	7.5
Total.....	331	100.0

Further information regarding the relative success of the ejidos may be gleaned from data concerning the accumulation of funds in the *fondo social* ("social fund"). Each credit society is supposed to deposit 5 per cent of its gross profits in a reserve fund in order to accumulate capital with which to operate. Until 1942 this fund could not be used for any other purpose. At that time, however, a ruling was made to the effect that it could be used by the bank to apply on

TABLE 38
AMOUNT OF FUNDS ACCUMULATED IN THE SOCIAL FUND
BY EACH EJIDO IN THE LAGUNA REGION

Total Amount Accumulated (Pesos)	No. of Ejidos	Percentage of Ejidos
None.....	122	36.9
Less than 10,000.....	142	42.9
10,000-24,000.....	45	13.6
25,000-49,000.....	16	4.8
50,000 and over.....	6	1.8
Total.....	331	100.0

the back debts of the society. A fairly good index of the financial standing of the society would therefore seem to be the total amount accumulated to its credit in the *fondo social*.

The data in Table 38 indicate that more than one-third of the societies have not been able to accumulate anything in the *fondo social* and that 79.8 per cent have less than 10,000 pesos (including those having none). On the other hand, six societies, or 1.8 per cent, have 50,000 pesos or more.

The three societies having the largest dividends in 1942 were (1) the society of Jiménez, which distributed a total of 265,029 pesos

among its 199 members, giving an average of 1,332 pesos per ejidatario in addition to the amount received as wages; (2) the society of La Paz, which distributed 168,755 pesos to its 153 members, giving an average of 1,103 pesos per ejidatario; and (3) the society of La Purísima, which distributed 138,522 pesos to its 271 members, giving an average of 511 pesos per ejidatario. It should be remembered that the amounts computed per individual are averages, since profits are not distributed equally even within the ejido. They are distributed according to the number of days a person worked. Some individuals may have received a great deal more than the average, and others a great deal less. It is likely that some individuals may have received as much as 2,000 pesos as a dividend during the year in addition to what they received as an anticipatory payment. Such income is almost fantastic in comparison to what these same individuals received as peons.

One would expect this increase in earnings to be accompanied by a corresponding increase in the standards of living; unfortunately, this is not always the case. It should be remembered, in the first place, that only a small proportion of the ejidatarios in the area receive these dividend payments. Many receive nothing but the anticipatory wage. In the second place, those who do receive dividends usually get them all at one time. A specific date is usually set apart for the distribution of profits to the members of a given ejido. The news of this event spreads, and itinerant salesmen from all over the region rush in to peddle their wares while the ejidatarios have money. Unfortunately, the latter have little sales resistance, and often these dividends are squandered on frivolities which contribute nothing to the long-time welfare of the family. Many of the ejidatarios receiving dividends are living in the same shacks that they occupied as peons. The Ejido Bank subsidized the construction of new houses for the families of one ejido by the name of Ana in the hope that other ejidos might copy them. There is little evidence, however, that any copying was done. An educational program apparently is necessary to stimulate wants on the part of the ejido families of a type that would make a permanent contribution to improved family living. A housing campaign might well be undertaken, for which purpose a specific proportion of the profits might be set aside each year and never be distributed in the form of cash. It might be well, also, to consider distributing the yearly profits of the enterprise a little at a time instead of all at once. The ejidatarios are not accustomed to handling large sums of money, and they are restless until it is spent. A surprisingly large

amount is spent on intoxicating beverages. Sale of such beverages is prohibited on the ejidos, but they are available in the near-by towns, and drunkenness among the ejidatarios is a very common phenomenon on holidays and week ends. It is said to increase drastically during periods immediately following the distribution of dividends.

SOCIAL SERVICES AND STANDARDS OF LIVING

The foregoing remarks should not be interpreted as meaning that no improvement in standards of living has been made. All observers seem to agree that the ejido program in this area has been accompanied by the development of certain social services, enjoyed by the population as a whole, which were not available before. They also seem to agree that in several respects the standards of living have been improved. Some of the aspects in which there appears to have been improvement, or lack of improvement, in the standards of living and in the social services available to the ejidatarios may be considered.

1. *Medical service.*—The medical service for the ejidos in the Laguna region was organized in 1937 soon after expropriation. During the first year the service was supported entirely by the federal government through the federal Department of Public Health. The following year the ejidatarios were asked to contribute 12 pesos per year per family. This amount was later increased to 24 pesos per year, and in 1943 the ejidatarios were contributing 48 pesos per family. Local officials hope that within a few years the organization can be supported entirely by the ejidatarios.

The service in 1943 included sixty full-time physicians, with numerous assistants, nurses, and other aids. Ejidatarios and their families have access to medicines, hospitalization, surgery, obstetrics, dental care, X-ray service, unlimited consultation, and advice on measures for preventing illness. The organization has a central hospital located in Torreón. There are also two smaller regional hospitals and a specialized clinic. Each of these regional hospitals is attended by two full-time physicians, a dentist, a midwife, two nurses, and a pharmacist. The clinic is served by five physicians on full time, six specialists on part time, two dentists, a midwife, six trained nurses, and a pharmacist.

In addition to the central hospital, the two regional hospitals, and the central clinic, there are fourteen decentralized medical units. Each unit is attended by two physicians, one midwife, a nurse, and a pharmacist; each also has an ambulance and a small pharmacy.

There are several first-aid stations, each attended by a trained nurse equipped with materials for giving vaccinations, inoculations, and first-aid treatments and for assisting ejidatarios to carry out treatments prescribed by the physicians. These local agencies serve the elementary needs of the ejidatarios and their families. When more adequate diagnosis or extended treatment is necessary, the individual is referred to one of the more elaborately equipped agencies.

The principal diseases in the area are said to be digestive disorders, Malta fever (it is said that Malta fever is more prevalent here than anywhere in Mexico), venereal diseases, and tuberculosis. The digestive disorders probably result in great part from polluted drinking water. The local health agencies recently tested the water in 314 ejidos and concluded that only 44 ejidos, or 14 per cent, had good drinking water. The service is conducting a campaign urging families to boil all the water they drink. Plans are also being formulated for the installation of water systems.

Local physicians claim that venereal disease is more common than in most other rural areas of Mexico. Prostitution is prohibited in the ejidos, but, with increased leisure, many of the younger men from the ejidos drive into town on week ends and patronize houses of prostitution, which are doing a flourishing business in Torreón. A resident of the city told the author that on one Saturday night he counted sixteen ejido trucks parked in the red-light district of Torreón. He assumed that these trucks came to town bringing men and boys who were patronizing the district. The physicians stress the need for organized recreational programs and educational activities to absorb the surplus leisure time that the ejido program has made available to the former peons. Without such programs the local culture is thrown off balance by the sudden availability of extra time which the inhabitants do not know how to spend. The Secretariat of Education has sponsored recreational activities on a minor scale in the form of basketball and baseball, but a much more comprehensive program is needed.

The ejidatarios seem to be showing increasing interest in the health service. The number of consultations and treatments is increasing month by month. At first, there was a great deal of resistance to the program. It was almost impossible to persuade women to go to the hospital for obstetrical service or even to consult a doctor; but now the physicians report that resistance is breaking down and that women take advantage of the available service.

Emphasis is now being placed on prevention of diseases through advice, vaccination, inoculation, and sanitation programs. Most of the

doctors meet Saturday afternoons to discuss accomplishments and problems encountered during the week and also to review current literature. It is the opinion of the physicians that this form of group medicine has great possibilities for this region.

2. *Schools*.—Schools are certainly much more numerous and adequately equipped than formerly. All the ejidos now have schools. Most of the school buildings have been constructed since expropriation, and, although some of them are too small and poorly arranged, they are much more adequate than previous ones.

3. *Housing*.—We have already stated that there appears to have been very little improvement in housing. In typical plantation fashion, many of the houses are attached to one another in long rows so that there are a great many people living in a very small space. In many cases the ejidatarios have continued to live in the same old structures that they occupied as peons. There is usually poor ventilation, and congestion is about as great as one would expect to find in an area of similar size in the city. As noted previously, some time ago the Ejido Bank constructed a complete set of new houses for the families of one ejido; nevertheless, there appears to have been no tendency, as yet, for neighboring ejidos to copy them. After examining these new houses, the author is inclined to think that they were designed more for display than for utility. They are very small and give the appearance of suburban residences rather than farm houses. They are so different in style from any other house types with which the ejidatarios are acquainted that it seems unlikely to the author that they will be copied extensively.

4. *Beds*.—Although little improvement is noticed in the houses as such, there has been considerable improvement in the furnishings which go into them. Nearly all the ejidatarios have beds, whereas formerly they slept on the floor or on the ground.

5. *Stoves*.—Nearly every home now has a stove of some sort instead of a *brasero* (charcoal burner). Some of these are kerosene, others are gasoline, and there are even some electric stoves.

6. *Radios*.—Many ejidatarios now have radios in their homes. This is something they never expected to have.

7. *Dress*.—Residents of the area say there has been a definite improvement in dress. Shoes are now worn by a large proportion of the ejidatarios, and modern European-type dress is fairly characteristic.

8. *Food*.—It is believed that a greater variety and perhaps a larger quantity of food is consumed now than formerly.

9. *Recreation*.—There is much more leisure time than formerly;

but, as yet, there are very few recreational facilities in the ejidos. Some, however, do have basketball courts and baseball diamonds. The Secretariat of Education has provided one full-time recreation specialist who organizes baseball and basketball contests among the different ejidos. He has organized several leagues, and there is considerable enthusiasm for these sports. Certainly the ejido families visit the cities much more frequently and attend movies, bullfights, and other amusements. One reliable informant told the author that occasionally an ejidatario and his family may be observed eating dinner at one of the better restaurants in Torreón. This was unheard of before.

10. *Consumers' co-operative stores.*—The ejido system would seem to be so organized as to lend itself well to the development of consumers' co-operative stores. These have been organized in a number of regions and in some have proved successful. They are reported to be especially successful at Los Mochis. They are also functioning at Tapachula and at Lombardía and Nueva Italia. They were established also in the Laguna region under the sponsorship of the Ejido Bank. It was apparently the intention that such a store should be established in each ejido, or at least in conveniently selected districts, so that they would be accessible to all the ejidos. The bank extended credit for the initiation of such enterprises but, after a brief period of trial, finally branded the project a complete failure and withdrew all support. It is claimed that funds were mismanaged, that incompetent store managers were selected, and that the project appeared to have little chance of success. At the present time there are no consumers' stores on the ejidos of this area. In each ejido there is a very small private store which carries a few of the more common necessities. For most merchandise the ejidatarios go to one of the larger towns.

11. *Purchasing power.*—Purchasing power is now distributed more evenly among the population of the region than formerly. Most residents of the area agree that, regardless of production figures, business activity has been greatly stimulated. It is attributed to the fact that the land was formerly held by a very few individuals who spent the profits in the capitals of European countries and elsewhere. Now money that was formerly spent in Paris is spent in Torreón to the benefit of the Mexicans themselves. Expropriation has resulted in a more equal distribution of the profits among resident workers of Mexico, and this is reflected in much greater consumption of goods and services on the part of the home folk. Drygoods stores, garages, farm-machinery stores, restaurants, hotels, banks, and other business

and commercial establishments have appeared in the area since expropriation. All the towns have grown rapidly in population.

12. *Individual freedom.*—Although there is frequent agitation on the part of a few ejidatarios to break up the collective ejido and divide the lands into individual strips, none of them want to go back to the hacienda system. All the ejidatarios with whom the author talked in the Laguna region feel that they have much more individual freedom now than they had as peons. Even the most discouraged claim that they are better off than they were on the haciendas. Perhaps this is a crucial point which should be taken into account in any final appraisal of the ejido system.

The Place of the Ejido in the Rural Economy

THE ejido program has now reached the stage where it is likely to exercise a crucial influence on the rural economy of Mexico. The ejidatarios themselves constitute 41.8 per cent of all persons gainfully employed in agriculture (Appen. A, Table 22), and if we were to include the members of ejido families who also work in agriculture as farm laborers, the proportion would probably reach as much as two-thirds.¹ The ejidatarios now make up 56.7 per cent of all rural landholders in the Republic. They possess 47.4 per cent of all crop land, 56.2 per cent of all irrigated land, 18.3 per cent of all pasture land, and 22 per cent of all land appearing in the census of 1940. The ejidatarios form such a large segment of the agricultural population that students of Mexico are beginning to recognize that the future welfare of rural Mexico is necessarily bound up with the relative success and failure of the ejidos.

We have also commented on the fact that in many areas of the country the farm land allotted to each ejido family appears to be too small for the adequate support of the family. For the country as a whole, the average ejidatario in 1940 had 18.1 hectares of land (Appen. A, Table 23), but only 4.4 hectares of crop land (Appen. A, Table 24).² This might be ample if the land were level, free from stones, sufficiently humid and of good quality and if modern farming techniques were used, but in many localities all five of these characteristics are lacking. Furthermore, there are variations in the size of the allotment from one region to another. In the central area, where the greatest concentration of rural population is found, the average

1. Data are not available on this latter point.

2. These figures are obtained by dividing the total amount of land by the total number of ejidatarios. According to the last columns of Tables 23 and 24, Appen. A, the ejidatarios who actually have possession of their lands have an average of 23.7 hectares of land and 5.8 hectares of crop land.

size is only 3.4 hectares. In ten states, located mostly in the central region, it is less than 4 hectares per person. In three states the average ejidatario has less than 2 hectares.

THE EJIDOS AS PART-TIME FARMING ENTERPRISES

As mentioned in a previous chapter, it appears that in the early stages of the agrarian program the ejido was viewed essentially as a part-time farming program that would offer farm laborers the opportunity of supplementing the income from their wages by raising some of their own food and fuel on a small strip of land. Mention was made in chapter v of the practice on many haciendas of allotting a small piece of ground to the more trusted peons to till either for themselves or on shares. The early agrarian lawmakers seemed to visualize a variation of this pattern as the ideal one for solving the problems of farm workers. Giving them permanent right to the use of a small strip of land without the necessity of paying rent or of dividing the crop was considered a sound way of increasing the income and security of these workers. Little thought was given to the size of the plot that would be necessary for the complete support of a family, since it was assumed that its primary purpose would be that of supplementing the wages received from work off the ejido.

As the ejido program gathered momentum and as large numbers of haciendas were expropriated, the work opportunities away from the farm began to diminish, and many of the ejidos tended to become virtually self-sufficient units of production. Gradually the ejidatarios found that they could subsist, though very meagerly, on the ejidos without the necessity of working elsewhere, and, in the absence of wants that would stimulate them to look for outside work, they drifted into the custom of permitting the work on the ejido to represent the totality of their efforts.

Recently the government has recognized that many of the ejidos are too small to satisfy the economic needs of families and is making serious efforts to enlarge the plots. This is a complicated problem, since in some areas most of the available land has now been allotted. To enlarge the size of each parcel would involve the wholesale shuffling of plots and the shifting of families from one plot to another. There is still a certain amount of unrest on the ejidos because of the fact that boundary problems have not all been settled yet, and to reshuffle all the plots again would result in tremendous confusion. The process is therefore likely to be a very slow one, with an adjustment made only here and there as opportunity permits. A number of plots

are abandoned each year, and there is some tendency to use these to enlarge others, but the problem of enlarging the plot generally is likely to challenge solution for a long time in the future.

The problem is further complicated by the fact that a large number of boys are becoming of age each year with the rapidly increasing population and are in need of plots. Hence there is constant pressure for additional plots, to say nothing about enlarging the existing ones. Fortunately, the allotments of land made in recent years are larger. Since 1937 the average number of hectares of crop land has been more than 6 per person each year. In 1945 the average was 8.3 hectares. The allotments of other types of land have also greatly increased in recent years. In February, 1947, an amendment to Article 27 of the Constitution was enacted which will increase the size of all grants to ejidatarios in the future to 20 hectares of irrigated land per person or its equivalent.

Although the proportion of the total working time which ejidatarios spend on the ejidos has now become relatively greater than the time spent working away from the ejidos, the importance of the latter should not be minimized. Many of the ejidatarios are still essentially part-time farmers. Of the 249 days that the average ejidatario worked in 1940, 186 were on the ejido, while 63 were off the ejido. In other words, one-fourth of the average ejidatario's working time in that year was spent in work away from the ejido, presumably either for wages on other farms or at handicrafts of one type or another (see Pl. VII). The proportion of time which the average ejidatario spent working away from the ejido declined from 45.1 per cent in 1935 to 25.3 in 1940.

The percentage of time spent working away from the ejido in 1940 varies according to states and regions (Appen. A, Table 25). In the central area one-third of the total number of days worked were away from the ejido. We have already noted that the plots are smaller in this region than in any other, and therefore there may be greater necessity for outside work. Within the central region the states showing the greatest proportion of days worked away from the ejido are the Distrito Federal, with 78.2 per cent, Hidalgo with 53.7, and México with 50.0. In these three states there is also found the smallest average plot of crop land per ejidatario. The average size of the plot is smaller in the Distrito Federal than in any other state in Mexico, while the outside work opportunities are probably greater because of the location of Mexico City in this district.

It would appear that the stimulation of outside-work opportunities

in the vicinity of the ejidos would be one important method of improving the welfare of the ejido population. In the absence of more farm land with which to increase the size of the plot and with an increasing rural population creating new demands for land, rural policy-makers might well explore the possibilities for encouraging the development of rural industries and crafts that would offer increasing opportunities for supplementary employment away from the ejido.

AGRICULTURAL PRODUCTION

In the absence of rural industries which would supplement their income, the future of many of the ejidos—perhaps the majority—appears to be rather dark. In 1940, for example, the Ejido Bank made a study of 4,568 ejidos with which it was operating, for the purpose of ascertaining the prospects for recovering loans made either in the past or to be made in the future. It concluded that 31.4 per cent of the ejidos could not possibly pay back any loans made to them because the value of the crops that they could raise on their lands would not amount to as much as that needed for the bare subsistence of their members. Another 54.4 per cent were classified as doubtful, either because more study was necessary to warrant a definite conclusion or because, although not now producing enough, they might possibly be reorganized so that production could be increased until it would be sufficient. Only 14.2 per cent were classified as producing enough, or more than enough, to cover the costs of subsistence for their members.³ Thus a total of 85.8 per cent of the 4,568 ejidos studied were not producing more than enough for bare subsistence at the time that the data were compiled.

Three fundamental questions now arise with reference to the ejido program. Are the types of crops grown on the ejidos any different from those grown on private holdings? Is the crop production as efficient on the ejido as on private holdings? What effect has the agrarian program had on the long-time trends in agricultural production in Mexico?

We must admit at the outset that data are unavailable to provide a decisive and conclusive answer to these questions. The ejido census and the agricultural and livestock census of 1940 will provide some light on the first two questions, and a few indices of production worked out by the Secretariat of National Economy may partially answer the third.

3. Salvador Lira López, Ramón Fernández y Fernández, and Quintín Olazcoaga, "*La Pobreza rural en México*" (Mexico City, 1945), p. 25 (mimeographed).

TYPES OF CROPS

As has been stated previously, the principal crop produced in Mexico is corn. Two-thirds (67.2 per cent) of the crop land in the entire country is devoted to corn (Table 39). The nearest competitor to corn is wheat, which occupies only 7.8 per cent of the crop land. Beans come third, with 4.1 per cent. It is quite probable that the area devoted to beans is understated by these figures, since in Mexico it is a rather common practice to plant beans between the rows of corn. Where this has been the case, only the corn was counted in the pres-

TABLE 39
PERCENTAGE OF MEXICO'S CROP LAND THAT IS
DEVOTED TO VARIOUS TYPES OF CROPS*

Type of Crop	Total Mexico	Ejidos	Private Holdings over 5 Hectares	Private Holdings 5 Hectares or Less
Corn.....	67.2	66.1	64.2	83.6
Wheat.....	7.8	9.3	7.0	4.2
Beans.....	4.1	5.1	3.7	1.0
Cotton.....	2.0	3.2	3.1	0.4
Barley.....	2.8	3.3	2.8	0.5
Coffee.....	2.5	1.4	3.7	2.7
Henequen.....	2.3	3.4	1.6	0.1
Sugar cane.....	1.7	2.0	1.4	0.9
Chickpeas.....	1.3	2.0	0.6	0.2
Bananas.....	1.0	0.9	1.4	0.5
Maguey.....	1.0	0.6	1.8	0.1
Sesame.....	0.9	1.3	0.8	0.1
Rice.....	0.8	1.0	0.7	0.1
Alfalfa.....	0.5	0.3	0.8	0.6
All other products.....	3.2	0.1	6.4	5.0
Total crop land....	100.0	100.0	100.0	100.0

* Preliminary data from Dirección General de Estadística (1910).

ent data. Cotton, barley, and coffee together occupy only 8.2 per cent of the crop land. The fourteen crops listed in Table 39 include all but 3.2 per cent of the crop land in Mexico.

We may conclude, from the remaining columns of Table 39, that on the ejidos a slightly larger proportion of the total crop land is devoted to the growing of corn than is true for the private holdings with more than 5 hectares; but that the proportion is lower on the ejidos than on the private holdings having only 5 hectares or less of land, where 83.6 per cent of the crop land is devoted to corn. The emphasis on corn probably is an indication of the subsistence nature of the agriculture, since neither the major part of the land nor the climate of Mexico is well adapted for corn.

TABLE 40

DISTRIBUTION OF WOODEN PLOWS IN MEXICO ACCORDING
TO TYPES OF HOLDING*

REGION AND STATE	TOTAL		IN EJIDOS	IN PRIVATE HOLDINGS OF OVER 5 HECTARES	IN PRIVATE HOLDINGS OF 5 HEC- TARES OR LESS
	Total No. of Plows	Percentage Wooden Plows	Percentage Wooden Plows	Percentage Wooden Plows	Percentage Wooden Plows
North Pacific . . .	97,687	18.1	19.5	15.5	21.6
Baja California N.	3,968	1.4	0.3	1.7	1.7
Baja California S.	1,003	8.9	1.5	15.5	8.8
Nayarit . . .	25,635	43.9	36.4	67.2	81.4
Sinaloa . . .	35,593	15.5	10.7	11.2	14.0
Sonora . . .	31,288	7.5	4.8	6.8	13.9
North . . .	443,650	42.1	43.4	38.3	50.2
Coahuila . .	31,372	11.5	10.4	7.3	4.2
Chihuahua . .	75,942	32.0	34.7	25.8	46.7
Durango . . .	69,719	52.4	51.8	50.5	69.3
Nuevo León .	46,395	12.5	8.7	13.1	17.7
San Luis Potosí	77,249	52.4	50.0	51.7	65.1
Tamaulipas .	36,150	7.6	8.0	6.6	11.8
Zacatecas . .	93,823	77.2	79.9	73.5	81.7
Central	899,671	60.8	57.7	67.6	61.2
Aguascalientes	15,730	31.4	79.0	71.3	71.4
Distrito Federal	12,532	24.8	18.4	10.0	31.5
Guanajuato	114,899	75.2	72.2	77.0	93.3
Hidalgo	65,134	35.0	31.7	40.6	43.6
Jalisco	157,161	70.8	64.1	74.1	86.5
México	148,958	63.1	62.9	53.9	66.7
Michoacán	144,330	72.6	68.0	76.0	87.1
Morelos	24,476	20.6	18.0	33.9	28.3
Puebla	147,793	50.2	45.4	47.2	58.7
Querétaro	30,702	87.8	86.5	88.2	95.0
Tlaxcala	37,956	15.7	19.3	7.6	14.1
Gulf	51,454	62.5	44.4	57.3	69.7
Campeche	22	9.1	00.0	13.3	00.0
Quintana Roo . . .	2	50.0	00.0	50.0	00.0
Tabasco	230	87.4	00.0	88.9	100.0
Veracruz	54,143	62.4	63.6	56.8	69.5
Yucatán	57	80.7	00.0	56.0	100.0
South Pacific	159,942	86.8	80.1	81.4	95.2
Colima	7,498	25.7	24.4	26.7	28.8
Chiapas	10,402	72.2	72.5	66.8	95.6
Guerrero	53,609	83.8	79.7	89.3	85.7
Oaxaca	88,433	95.5	92.4	91.0	97.8
Total Mexico . . .	1,655,204	55.8	53.3	53.8	65.7

* Compiled from preliminary data of *Segundo censo ejidal* (1940) and *Segundo censo agrícola-ganadero* (1940).

Compared with private holdings, the ejidos have a larger proportion of their farm lands devoted to wheat, beans, barley, henequen, sugar cane, chickpeas, sesame, and rice. Most of these products are probably confined to the commercialized collective ejidos. The proportion of land devoted to "all other products" on the larger private holdings is 6.4 per cent as compared with 0.1 on the ejidos and 5.0 on the smaller private holdings.

DISTRIBUTION OF WOODEN PLOWS

Some indication of the backwardness of the methods of agricultural production may be gleaned from the distribution of the wooden plow as a farm implement (Table 40).

For the country as a whole, 55.8 per cent of all plows are of the homemade wooden variety. The use of the wooden plow increases as one goes southward from the United States border, with certain exceptions. It is less common in the north Pacific and north regions, increases to 60.8 per cent in the central region, to 62.5 in the Gulf region, and to 86.8 in the south Pacific. Practically no plows of any description are used on the Yucatán Peninsula. Campeche, Quintana Roo, Tabasco, and Yucatán altogether had only 311 plows in 1940, and, of these, 80.4 per cent were of the wooden variety. Much of the peninsula consists of shallow soil resting on limestone ledge. Farming procedures consist of cutting down the brush, burning it, and digging small holes with a stick into which kernels of corn are dropped. After a plot has been planted for two or three years, it is allowed to grow up to brush again to restore its fertility, and a new plot is cleared. Much of the area is devoted to forest products rather than to field crops, and the plow is seldom found.

Almost the same percentage of wooden plows is found on the ejidos (53.3 per cent) as on the private holdings with more than 5 hectares, but a much smaller proportion than on the private holdings with 5 hectares or less (65.7 per cent). Variations are important among the states in every region.

CROP YIELDS

Crop yields for the basic agricultural commodities in Mexico are generally low in comparison with those in the United States. In 1940, for example, the average yield of corn per acre in Mexico was only 7.8 bushels as compared with 28.4 for the United States (Table 41). Mexico produced 11.5 bushels of wheat per acre as compared with

15.3 in the United States. Production of barley was 14.7 bushels per acre in Mexico and 22.9 in the United States.

At this writing, data on comparative yields of crops on the ejidos and the private holdings are unavailable for the country as a whole, but tabulations have been made for fifteen states distributed throughout the country so as to give a reasonably good sample of the entire country. The yields for seven principal crops in the fifteen sample states are given for the ejidos and for private holdings in Table 42 in units of the average number of kilograms produced per hectare. In every case the yield is somewhat smaller on the ejidos than for the

TABLE 41
AVERAGE YIELDS PER ACRE OF CORN, WHEAT, AND
BARLEY IN MEXICO AND SELECTED OTHER
COUNTRIES AS OF 1940*

COUNTRY	AVERAGE NO. OF BUSHELS PER ACRE		
	Corn	Wheat	Barley
Mexico	7.8	11.5	14.7
Uruguay	8.1	7.6	8.1
Chile	20.1	14.9	27.0
Spain	26.1	9.1	15.6
United States	28.4	15.3	22.9
Argentina	33.1	18.0	
Canada	37.4	18.8	24.6

* Data from United States Department of Agriculture, *Agricultural Statistics* (1944).

country as a whole. Yields are considerably smaller on the ejidos for each crop than yields found on private holdings with more than 5 hectares. However, in some cases the yields on private holdings of only 5 hectares or less are smaller than those recorded on the ejidos. This is true of beans, cotton, and bananas.

VALUE OF CROPS

Comparative data on the value per hectare of seven of the principal crops grown in the fifteen sample states indicate that the value is somewhat lower for every one of these crops on the ejidos than the national average (Table 43). In every instance private holdings having more than 5 hectares of land realize greater returns per hectare of the various crops than do the ejidos. On the other hand, the value of crops on the ejidos is greater in some instances than that on the small

TABLE 42

**YIELD PER HECTARE OF SEVEN PRINCIPAL CROPS IN MEXICO
A COMPARISON OF THE EJIDOS WITH PRIVATE HOLDINGS*
(Based on Fifteen Sample States)**

SEVEN PRINCIPAL CROPS	NO. OF KILOGRAMS PER HECTARE			
	Total	Ejidos	Private Holdings of 5 Hectares or Less	Private Holdings over 5 Hectares
Corn.....	691.3	664.6	715.0	726.1
Wheat.....	740.6	640.5	658.9	911.0
Beans.....	764.8	726.1	387.4	867.4
Cotton.....	885.9	755.7	642.9	1,147.3
Barley.....	511.5	445.9	840.4	614.0
Coffee.....	582.7	360.4	416.2	842.9
Bananas.....	7,790.5	5,514.2	5,331.5	11,764.3

* Compiled from preliminary data of *Segundo censo ejidal* (1940) and *Segundo censo agrícola-ganadero* (1940).

TABLE 43

**VALUE PER HECTARE OF SEVEN PRINCIPAL CROPS IN MEXICO
A COMPARISON OF THE EJIDOS WITH PRIVATE HOLDINGS*
(Based on Fifteen Sample States)**

SEVEN PRINCIPAL CROPS	PESOS PER HECTARE			
	Total	Ejidos	Private Holdings	
			5 Hectares or Less	Over 5 Hectares
Corn.....	65.72	62.05	74.87	68.30
Wheat.....	147.55	142.81	117.39	158.77
Beans.....	137.70	130.72	90.63	154.88
Cotton.....	395.11	345.96	520.17	491.89
Barley.....	32.02	28.01	72.55	37.67
Coffee.....	261.35	175.94	255.91	339.48
Bananas.....	427.86	325.54	273.40	592.05

* Compiled from preliminary data of *Segundo censo ejidal* (1940) and *Segunda censo agrícola-ganadera* (1940).

private holdings having only 5 hectares or less. This is true in the case of wheat, beans, and bananas.

Summary figures on the value of all crops produced in the fifteen sample states give the following comparative differences between ejidos and private holdings:

Average	Pesos per Hectare
All types or holdings	128.96
Ejidos	120.58
All private holdings	138.34
Private holdings with 5 hectares or less	133.37
Private holdings with over 5 hectares	139.96

From the foregoing data it would appear that the ejidos in general realize a smaller return from their farming operations than do either the large or the small private holdings. A similar conclusion was reached in the preceding chapter, wherein the production of cotton was shown to be smaller on the ejidos of the Laguna region than on the private holdings in the same area.

LIVESTOCK PRODUCTION

The foregoing discussion takes into account only the production on crop lands. The production of livestock is also important on the

TABLE 44
DISTRIBUTION OF LIVESTOCK ON THE EJIDOS IN COMPARISON
WITH THAT IN ALL MEXICO*

Type of Livestock	No. on Ejidos	Total No. in Mexico	Percentage on Ejidos
Cattle	2,651,419	11,663,470	22.7
Horses	757,509	2,501,507	30.3
Mules	268,888	926,116	29.0
Burros	778,302	2,331,370	33.4
Sheep	1,165,650	4,464,256	26.1
Goats	2,206,411	6,854,276	32.2
Swine	1,702,526	5,030,498	33.8
Poultry	12,452,823	36,382,262	33.8

* Preliminary data from *Segundo censo ejidal* (1940); and *Segundo censo agrícola-ganadero* (1940).

ejidos as well as on private holdings. In 1940 the ejidos had 2,651,419 head of cattle, or slightly more than 2½ head per family (Table 44). The ejido cattle make up 22.7 per cent of all cattle in Mexico. When the number of cattle is related to the pasture land available, it would seem that the ejido lands are somewhat more densely populated with cattle than are the private holdings, since it will be recalled that only

18.3 per cent of all pasture land is found on the ejidos. The ejidos possess about one-third of all the goats, swine, poultry, and burros found in Mexico. They have 30.3 per cent of the horses, 29 per cent of the mules, and 26.1 per cent of the sheep. Thus it is obvious that the ejidos play an important role in the livestock industry of Mexico.

In a recent study of the agrarian program made by Marco Antonio Durán⁴ it was concluded that one of the fundamental mistakes of the agrarian program was the failure to grant more pasture lands to the ejidatarios. He points to the fact that the ejidatarios have about 47 per

TABLE 45

A COMPARISON OF THE TYPES OF MILK COWS FOUND ON EJIDOS
AND PRIVATE HOLDINGS OF MEXICO*

TYPE OF HOLDING	TOTAL NO. OF COWS		TYPES OF COWS			
			Purebred or High Grade		Common or Low Grade	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Ejidos.....	943,277	22.1	24,152	7.2	919,125	23.3
Private holdings.....	3,390,077	77.9	312,615	92.8	3,017,462	76.7
5 hectares or less.....	1,526,795	35.7	81,606	24.2	1,445,189	36.8
Over 5 hectares.....	1,803,282	42.2	231,009	68.6	1,572,273	39.9
All holdings.....	4,273,354	100.0	336,767	100.0	3,936,587	100.0

* Data compiled from *Segundo censo ejidal* (1940); and *Segundo censo agrícola-ganadero* (1940).

cent of the crop land but only about 18 per cent of the pasture land. He asserts that this low ratio of pasture land to crop land means that the possibilities are almost completely blocked for developing the livestock industry on the ejidos. He claims that on many of the ejidos there is only enough pasture land to graze about one or two head of livestock per family.

There is some evidence to indicate that the quality of livestock is poorer on the ejidos than on the private holdings (Table 45). On the ejidos are found 22.1 per cent of all milk cows in the Republic but only 7.2 per cent of the purebred or high-grade cows. On the other hand, the private holdings contain 77.9 per cent of all milk cows and 92.8 per cent of the high-grade or purebred cows. Another way of stating these relationships is to say that in the Republic as a whole 7.9

4. "Del agrarismo a la revolución agrícola," *Problemas económico-agrícolas de México*, II (October-December, 1946), 3-85.

per cent of the milk cows are purebred or high grade, while on the ejidos the percentage is only 2.6. On the private holdings with 5 hectares or less, 5.3 per cent are high grade and 12.8 per cent on holdings with over five hectares.

The government is making an attempt to improve the quality of the cattle on the ejidos in recent years by requiring the large ranchers who secure inalienability of their properties from expropriation to deliver 2 per cent of the bull calves they produce each year to the government for distribution to the ejidos for breeding purposes. If this law were strictly enforced, it might serve in the long run to grade the ejido cattle upward. It would take a long time to experience appreciable effects, however, because the ejidatarios are not familiar with good breeding practices or with the qualities which constitute high-grade cattle.⁵ Because of lack of equipment, such as fences, corrals, and watering facilities, they would experience difficulty in operating according to modern standards, even if they knew what those standards were. Usually, all the livestock owned by the members of a given ejido are herded together on the common pasture lands; cows, scrawny bulls of the poorest grade, and young stock, and usually a few goats, sheep, and burros are all to be found in the same herd. No attempt is made to separate breeding animals from the others, hence there is little chance of upgrading the herd.⁶ Perhaps it should be said that similar management practices prevail on many of the smaller private holdings. It is mostly on a few specialized dairy farms and on some of the larger ranches of the north which produce beef cattle that attention is given to cattle breeding. Some of the privately owned ranches in the north have as high-grade herds of Hereford and Shorthorn beef cattle as are to be found anywhere.

The livestock industry of Mexico recently received a severe blow through an outbreak of hoof-and-mouth disease. The first signs appeared in November, 1946, in the state of Veracruz, and quickly spread to many other parts of the country. Mexico has asked the United States for co-operation in eradicating the disease, and the two countries have drawn up a joint program under the auspices of the Mexican-United States Agricultural Commission. Thousands of head of cattle are being slaughtered in order to stamp out the dreaded disease. Just how soon it will be brought under control and what effect it will have on future livestock production in Mexico it is impossible to

5. Mervin G. Smith, "The Mexican Beef-Cattle Industry," *Foreign Agriculture*, VIII, No. 11 (November, 1944), 251.

6. *Ibid.*, pp. 250, 251.

determine at this time. There is some danger that social unrest may develop among the peasants, since the slaughtering of their cattle may leave them without work stock as well as without milk or meat.

TRENDS IN AGRICULTURAL PRODUCTION

Since agricultural production appears to be lower on the ejidos than on the private holdings, the important question now arises as to what effect the Revolution and the agrarian reforms have had on the agricultural production of the nation. Does lower relative production on the ejidos at the present time, in comparison with production on the private holdings, mean that production in general has declined as a result of the Revolution? Not necessarily. As was pointed out in chapter v, the old haciendas were never organized as efficient production enterprises except in isolated instances, and they were able to persist only by exploiting both labor and land. It is quite possible that enough more land has been brought into production and that the smaller private holdings are sufficiently more efficient than the old haciendas to result in greater total production in spite of the inefficiency on the majority of the ejidos. This appears to be exactly what has happened.

Data on agricultural production are far from satisfactory for the prerevolutionary period. During the Díaz regime there were no systematic methods of crop reporting, and the data on crop yields for that period show violent fluctuations at times without any logical explanation for them. To give a few illustrations: Production of corn during the Díaz regime did not reach more than about 3,000,000 tons prior to 1907. In 1907 it was recorded as being more than 5,000,000 tons. Tobacco production did not reach as much as 20,000 tons in any year of the Díaz regime except for 1898, when it was recorded as 44,689 tons. Cotton production did not reach as high as 60,000 tons in any year except in 1905, when it was recorded as 148,574 tons. Such violent increases are hard to explain. Some of the more vociferous critics of the Revolution readily accept the figures on corn production for 1907 as being representative of the Díaz regime and use that year as a basis for comparing the relative production at the present time.⁷ They make no mention of the fact that, from the standpoint of corn production, 1907 was a most "unusual" year, to say the least. It is easy to see why they always reach the conclusion that agricultural production has declined drastically since the Revolution.

Data are practically nonexistent for the period of the Revolution.

7. See, e.g., an article in *La Nación*, December 23, 1944, p. 21.

It was not until 1925, when the Dirección de Economía Rural was established in the Secretariat of Agriculture that systematic attempts to gather data on agricultural statistics were introduced into the post-revolutionary period. Table 46 has been prepared from such data as are available. This contains three five-year averages for the production of each of the principal crops of Mexico. Production is given in metric tons. The first period extends from 1903 to 1907 and represents the prerevolutionary period. Data for these years are taken from the *Anuarios de Peñafiel*, which is generally considered to be the most accurate available for this early period. The second period extends

TABLE 46
CHANGES IN PRODUCTION OF CERTAIN CROPS FOR SELECTED PERIODS, 1903-44

Crops	FIVE-YEAR AVERAGE				
	Production in Metric Tons*			Relative Change in Production 1903-7 = 100	
	1903-7*	1925-29†	1940-44‡	1925-29	1940-44
Grains					
Corn ..	2,875,677	1,960,712	2,067,138	68	72
Wheat .	312,313	348,192	429,621	111	138
Rice ..	28,040	82,165	111,628	293	398
Barley...	170,021	83,062	90,106	49	53
Vegetables					
Beans	168,590	169,621	157,022	101	93
Chickpeas	40,128	71,533	77,192	178	192
Tomatoes...	7,168	79,020	149,172	1,102	2,081
Green chile...	44,006	18,077	31,163	41	71
Dry chile...	8,540	7,094	13,481	83	158
Fruits					
Bananas.....	44,569	327,341‡	415,639	734	933
Pineapples	4,790	17,986	53,279	375	1,146
Fibers					
Cotton	66,538	54,813	96,328	82	145
Henequen	99,233	132,445	114,911	133	116
Oilseeds					
Peanuts..	7,577	6,494	40,069	86	529
Sesame....	35,368	11,793	67,604	33	191
Other crops					
Sugar cane.	1,828,860	3,000,768	6,138,403	164	336
Coffee.....	38,569	39,741	53,516	103	139
Tobacco...	16,023	10,790	21,442	67	133
Vanilla . .	221	76	129	34	58

* Data compiled from *Anuarios de Peñafiel* (1903-7).

† Data from Dirección de Economía Rural.

‡ Average 1927-29.

from 1925 to 1929 and represents the first available data after the Revolution. The third includes the recent period extending from 1940 to 1944. It appears from these data that total production has declined for corn, barley, beans, green chile, and vanilla. On the other hand, production has increased for all the other products listed. Increases have been spectacular for tomatoes, pineapples, and bananas and pronounced for rice, peanuts, sugar cane, cotton, and other articles. In other words, production has declined for the basic Mexican subsistence crops of corn and beans, but the agricultural base has been broadened to include substantial production of a number of

TABLE 47
LIVESTOCK POPULATION IN MEXICO IN 1902, COMPARED
WITH THAT OF 1930 AND 1940*
(In Thousands of Head)

CLASS OF LIVESTOCK	No. IN 1902	No. IN 1930	No. IN 1940	PERCENTAGE INCREASE	
				1940 over 1902	1940 over 1930
Cattle.....	5,142.5	10,083.0	11,663.5	55.9	13.5
Horses.....	859.2	1,887.5	2,501.5	65.6	24.5
Mules.....	334.4	751.3	926.1	63.8	18.8
Burros.....	228.0	2,159.7	2,331.4	81.0	7.3
Sheep.....	3,424.4	3,673.9	4,464.3	23.3	17.7
Goats.....	4,206.0	6,544.1	6,854.3	38.6	4.5
Hogs.....	616.1	3,698.2	5,030.5	87.7	26.4

* Data for 1902 and 1930 from Eyer N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, N.C., 1937), p. 686; data for 1940 from Dirección General de Estadística.

other crops that were almost unknown during the Díaz regime. This may be a good sign. Much of Mexico's soil and climate are ill adapted to the growing of corn, and the shift to other crops at the expense of corn may be a sign of progress. At any rate, critics of the Revolution should take the development of these other crops into consideration and not base their conclusions solely on the relative production of subsistence crops during the two periods.

A comparison of data on livestock production shows a definite increase in production in recent years over the prerevolutionary period. Data are given in Table 47 for the years 1902, 1930, and 1940. The year 1940 shows an increase over 1902 and 1930 in the number of animals for every class of livestock.

That agricultural production has increased considerably over the prerevolutionary period is substantiated by data from the Secretariat of National Economy. In this secretariat there is an office known as

the "Oficina de Barómetros Económicos," which keeps a production index of agricultural and industrial production. One of the most recent indexes of agricultural production prepared by this office uses the year 1929 as the base year equal to 100 and concludes that total agricultural production increased from 94.3 in 1904 to 157.5 in 1944 (Table 48). The index for food products, including corn, beans, rice,

TABLE 48

INDEXES OF THE VOLUME OF AGRICULTURAL PRODUCTION IN MEXICO, BY YEARS*
(1929=100)

Year	General Production	Food Products†	Agricultural Industrial Products‡	Fruits§	Forage Products||
1893..	37.6	45.7	22.7	5.9	.....
1894... ..	70.4	103.3	30.8	5.0	.....
1895... ..	80.7	97.8	59.2	6.0	.....
1896... ..	87.0	116.7	46.2	7.0	.....
1897.....	97.9	138.7	47.0	8.0	.....
1898..	111.8	142.8	64.7	15.7	.....
1899..	83.0	119.3	43.2	11.7	.....
1900... ..	87.9	117.1	49.7	7.3	.....
1901..	95.8	129.5	60.5	26.2	.....
1902..	79.7	98.9	55.6	5.8	.....
1903..	97.9	116.4	78.4	7.7	.....
1904... ..	94.3	112.0	74.8	21.5	.....
1905... ..	106.8	137.0	65.3	16.4	.....
1906... ..	113.1	143.3	71.3	10.8	.....
1907... ..	149.7	203.8	81.6	11.1	.....
1908... ..	130.3	150.0	109.3	18.0	.....
1909... ..	151.9	174.8	123.5	20.0	.....
1910... ..	143.4	159.3	127.2	21.0	.....
1925..	109.3	121.8	92.7	85.2	86.4
1926... ..	120.2	127.8	116.6	55.9	94.3
1927... ..	107.8	121.1	88.4	85.5	90.8
1928... ..	119.1	129.5	107.6	93.4	94.3
1929... ..	100.0	100.0	100.0	100.0	100.0
1930... ..	90.3	92.8	83.5	99.0	89.0
1931... ..	115.1	131.3	90.9	102.8	87.3
1932... ..	100.1	112.6	76.5	93.6	87.9
1933... ..	107.7	119.6	92.6	103.0	81.5
1934... ..	97.8	106.0	81.1	123.0	90.4
1935... ..	106.3	106.1	106.1	161.0	83.6
1936... ..	117.8	111.9	133.5	165.8	76.7
1937... ..	109.9	106.4	118.9	169.7	79.3
1938... ..	110.6	111.3	109.8	167.5	82.1
1939... ..	125.0	131.2	113.7	175.1	92.0
1940... ..	115.1	115.6	118.4	145.6	91.7
1941... ..	150.9	169.1	137.6	147.0	96.3
1942... ..	156.0	160.2	167.1	153.8	95.2
1943... ..	144.5	131.6	181.7	160.7	104.7
1944.....	157.5	160.0	163.5	153.4	108.6

* Data from Oficina de Barómetros Económicos, Secretaría de la Economía Nacional.

† Corn, beans, rice, coffee, dry chile, wheat, chickpeas, and tomatoes.

‡ Cotton, benequen, and sugar cane.

§ Bananas and oranges.

|| Green alfalfa.

coffee, dry chile, wheat, chickpeas, and tomatoes, increased from 112 in 1904 to 160 in 1944. Agricultural industrial products, including cotton, henequen, and sugar cane, increased from 74.8 in 1904 to 169.5 in 1944. Fruit production, including bananas and oranges, increased from 21.5 in 1904 to 158.4 in 1944.

IMPORTS AND EXPORTS OF AGRICULTURAL PRODUCTS

Data on foreign trade indicate that Mexico imports some of her basic foodstuffs and exports a variety of other agricultural products. Imports during the five-year period 1940-44 included such basic commodities as wheat, corn, and sugar (Appen. A, Table 26). Wheat was the principal product imported, with an average of more than 200,000 tons each year. Most of this was imported during 1943 and 1944. Imports of corn averaged somewhat more than 38,000 tons per year, and most of this was imported in 1944. The high imports of corn and wheat in 1944 were due largely to the drought of 1943, which resulted in a poor crop and hence in a reduced amount available for food in 1944. The average amount of corn imported for the four-year period 1940-43 was only 10,193 metric tons, and the average amount of wheat imported during the same years was 131,369 tons.

Some have pointed to these imports as evidence that Mexican agriculture has deteriorated to the extent that Mexico does not now produce even enough to eat. Importation of basic food products into Mexico, however, is by no means confined to recent years. Mexico has nearly always imported corn and wheat in varying proportions. During the five-year period 1903-7, for example, an average of 23,614 tons of corn and 14,951 tons of wheat were imported each year.

The principal exports of agricultural products during the five-year period 1940-44 consisted of bananas, henequen, tomatoes, chickpeas, coffee, pineapples, cotton, and cattle (Appen. A, Table 27).

Data are not available separately during the prerevolutionary period for exports of bananas, tomatoes, and pineapples, but it is generally conceded that they were far below recent exports of these products. For certain other commodities for which data are available for the early period, a comparison of the export commodities for the two periods is given in Table 49. Exports of henequen were less in 1940-44 than in 1903-7. Exports of all other products listed, however, were considerably larger in 1940-44.

Thus it would appear from such data as are available that total production of the principal crops of Mexico, with the exception of a few of the staples, such as corn, beans, and henequen, has increased. More

products have been sold on the export market, even though Mexico's population was 43 per cent greater in 1944 than in 1910, with 6,500,000 more mouths to feed.

THE OUTLOOK FOR SURPLUS EJIDO POPULATION

Although the total agricultural production has increased somewhat in recent years, it should be pointed out that the population is also increasing and is likely to make increasing demands on agriculture in the future. Some of the increase in production may have been due to the plowing-up by the ejidatarios of lands that formerly were used only for pasture or for woodlands. Certainly the antiquated methods

TABLE 49
EXPORTS OF CERTAIN PRODUCTS FROM MEXICO FOR
THE FIVE-YEAR PERIOD 1903-7, COMPARED WITH
EXPORTS FOR THE PERIOD 1940-44*

Product	No. of Metric Tons Exported	
	Five-year average 1903-7	Five-year average 1940-44
Henequen	97,000	76,300
Chickpeas.	12,000	41,758
Coffee.....	18,000	29,955
Cotton.....	7,000	10,782
Rice...	4,000	6,749

* Data for 1903-7 computed from Eyles N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, N.C., 1937), pp. 681, 692; data for 1940-44 from Dirección General de Estadística.

of production now generally prevalent on the individually operated ejidos do not offer much hope for increasing production rapidly enough in the near future to provide for the increasing population even at present living standards, to say nothing about raising these standards.

A serious problem will be facing the ejidos as more young people grow up and need lands. Many of the plots in the Central Mesa are too small now to support a family adequately, and there is little more land in this region that is available for redistribution. Nevertheless, the rural population is steadily increasing, and the problem of providing opportunities for the surplus ejido population is a serious one. What will the sons and daughters of the ejidatarios do for land as they become of age and wish to establish homes? The agrarian law quite rightly prohibits the subdivision and alienation of ejido lands; therefore, an ejidatario cannot legally divide his diminutive strip among

his children. He may pass it on intact to one of his heirs, but what will the others do? Opportunities for employment away from the ejido are not very plentiful in rural Mexico today. A few of the alternative possibilities may be mentioned.

RENTERS AND SHARECROPPERS

One slender opportunity for the surplus ejido population would be to rent lands from private owners on a sharecropping basis. It will be remembered that sharecropping was a common practice when the hacienda system was at its height. The hacendado frequently tilled his best lands directly by means of hired laborers and let the poorer lands out to sharecroppers (*medieros*), who assumed all the risks of growing the crops and delivered half the product to the hacendado as rent for the use of the land. Although the breaking-up of the large haciendas has resulted in a drastic curtailment of the practice of sharecropping, it is still practiced in some areas, though on a much smaller scale. There are instances where the ejidatario rents a little land which, in addition to his plot, gives him a larger unit of production. Most of the ejidatarios are financially unable to pay cash, so they usually promise half the crop instead. In many instances the landowner furnishes little more than the seed for planting; sometimes, in areas where the population is dense in relation to available farm lands, the landowner furnishes nothing but the land. A representative of the National Agricultural Bank in the region of Mixteca in the state of Oaxaca described the practice existing there in 1944 as follows: "Those persons having large holdings (large in relation to other holdings in the area but usually not in excess of 30 hectares) have the custom of letting their land out to others who have little or no land. By merely furnishing the seed, and sometimes not even that, they get half of the crop. The sharecropper does all the work and furnishes the necessary animals and equipment."⁸

Data have not as yet been tabulated from the 1940 census that would indicate the amount of renting and sharecropping in the Republic. In 1930 the number of renters was given as 28,271 and the number of sharecroppers (*aparceros*) as 8,412. In Mexico, generally, the sharecropper is regarded as occupying an even lower plane of existence than the farm laborer. The lands he gets are usually of the poorest quality, the risks he bears are important, and his chances of realizing the equivalent of a wage for his work are small.

The renter, on the other hand, may be a person of considerable

8. Lira López, Fernández y Fernández, and Olazcoaga, *op. cit.*, p. 30.

means. In the previous chapter it was mentioned that the ex-hacendados in the Laguna region often rent land in order to increase the size of the farm business. This practice is also common in northern Sinaloa, where commercial tomato-growers often rent land to supplement their own possessions. Sometimes this extra land is rented from ejidatarios, although this is contrary to law.

FARM LABORERS

Perhaps the principal outlook for the children of the ejidatarios at the present time is to become farm laborers. They might live at home and try to find work in the vicinity of the ejido. This would be only a temporary solution at best, since the birth rate is high in Mexico, and as the descendants of the ejidatarios increase in numbers there would not be room for them all. Furthermore, the employment opportunities on private farms in the vicinity of the ejidos are limited. Therefore, they might have to leave the parental home and migrate to the more highly commercialized farming areas and seek employment as farm hands, or they might become migratory farm workers and follow the crops from one region to another as the demands for their services fluctuate with the varying crop seasons in different regions.

According to the census of 1940, about half (49.4 per cent) of all the gainfully employed persons in agriculture are classified as farm laborers (Appen. A, Table 28). This does not mean that they are entirely without land. Some of them may have small holdings that are cared for by other members of the family while the head of the household seeks to supplement his earnings as a wage hand. The vast majority are probably landless, however, and entirely dependent on their farm wages for the support of their families.

Labor legislation has made it possible for some of the agricultural laborers to unionize and demand higher wages. These unions were instrumental in bringing about expropriation proceedings in the Laguna region, the Yaqui Valley, Lombardía and Nueva Italia and other areas. A study made in 1934 indicates that there were at that time in the Republic 343 labor unions of agricultural workers, with a total of 36,270 members, or 1.3 per cent of all farm laborers. In 1941 there were 2,170 unions with a membership of 179,771 persons, or 9.5 per cent of the total number of farm laborers.⁹ One of the most important contributions of labor legislation has been the establishment of minimum wages for farm labor. Wages are worked out for each municipality in the Republic and vary from one area to another according to

9. *Ibid.*, p. 33.

local conditions. Although they are not always enforced, they have served as a guide in setting standards for the future. In 1934 the average minimum wage for farm labor in the Republic was 1.07 pesos. This had increased to 1.66 pesos in 1944-45. By states, the lowest minimum wage in 1945 was 1.01 pesos in Guanajuato; the highest was 5.58 in Baja California Norte.

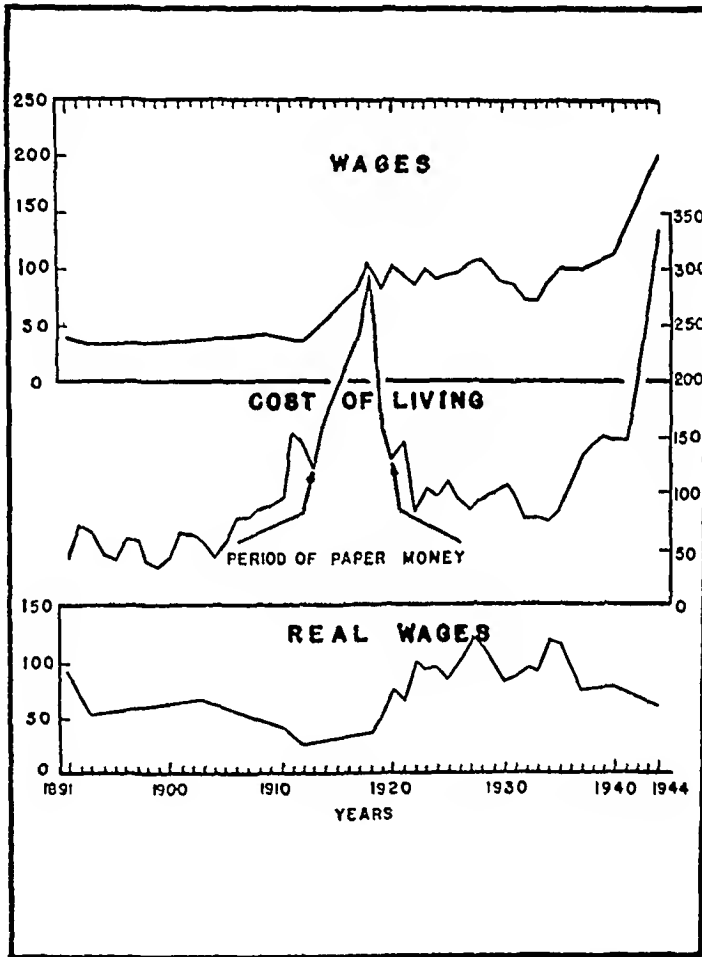


FIG. 22.—Trend in nominal wages, cost of living, and real wages of agricultural laborers in Mexico, 1891-1944. Index numbers with 1929 equal to 100. From Ramón Fernández y Fernández, *Los Salarios agrícolas en 1944*, p. 45.

There has been considerable increase in the wages paid to farm labor since the Revolution. According to Ramón Fernández y Fernández, who recently made a comprehensive study of the wages of farm labor in Mexico,¹⁰ the average daily wage increased from 0.40 pesos in

10. *Los Salarios agrícolas en 1944* (Mexico City: Secretaría de Agricultura y Fomento, 1946), pp. 8, 9.

TABLE 50

AVERAGE WAGES RECEIVED BY FARM LABOR IN MEXICO FOR
SELECTED YEARS 1907-44, BY STATES AND REGIONS*
(In Pesos)

States and Regions	1907-10	1925	1929	1935	1940	1944	Legal Minimum Wage 1944-45
North Pacific.....			1.06	1.27	1.70	2.77	2.33
Baja California N.....				1.50	4.40	5.89	5.58
Baja California S.....	0.65			1.50	1.55	2.58	2.23
Nayarit.....	0.37	1.57	1.12	1.04	1.37	2.58	2.21
Sinaloa.....	0.69	1.39	1.53	1.17	1.46	2.58	2.01
Sonora.....	0.87	1.97	2.33	1.56	1.85	2.65	2.35
North.....			1.03	1.00	1.21	1.90	1.69
Coahuila.....	0.43	1.15	1.30	1.03	1.45	2.24	1.91
Chihuahua.....	0.58	1.26	1.12	1.53	1.48	2.20	2.34
Durango.....	0.49	1.31	1.09	1.04	1.28	2.02	1.75
Nuevo León.....	0.62	1.21	1.16	0.89	1.20	1.93	1.60
San Luis Potosí.....	0.24	0.54	0.87	0.79	1.00	1.42	1.31
Tamaulipas.....	0.87	1.01	1.14	1.18	1.26	2.21	1.52
Zacatecas.....	0.30	0.94	0.74	0.89	0.97	1.56	1.50
Central.....			0.75	0.86	0.96	1.81	1.50
Aguascalientes.....	0.34	0.47	0.47	0.75	0.82	1.69	1.84
Distrito Federal.....	0.37		1.23	1.22	1.42	2.37	2.45
Guanajuato.....	0.30	0.69	0.67	0.92	0.79	1.63	1.01
Hidalgo.....	0.34	0.66	0.79	0.86	0.91	1.41	1.48
Jalisco.....	0.41	0.68	0.68	0.74	1.07	2.30	1.72
México.....	0.29	0.74	0.74	0.86	0.97	1.76	1.40
Michoacán.....	0.39	0.82	0.82	0.91	0.99	2.08	1.45
Morelos.....	0.44	1.37	1.49	1.02	1.42	2.88	1.72
Puebla.....	0.32	0.66	0.72	0.82	0.93	1.55	1.69
Querétaro.....	0.28	0.46	0.61	1.00	0.82	1.08	1.45
Tlaxcala.....	0.51	0.82	0.88	0.78	1.05	1.51	1.46
Gulf.....			1.53	1.31	1.41	2.15	2.08
Campeche.....	0.50	1.25	1.21	1.55	1.84	2.42	2.63
Quintana Roo.....				1.50	3.00	3.58	4.17
Tabasco.....	0.50	0.97		1.50	1.30	2.16	1.56
Veracruz.....	0.39	1.23	1.47	1.25	1.36	2.09	2.06
Yucatán.....	0.65	2.05	1.80	1.39	1.60	2.34	2.48
South Pacific.....			0.70	0.73	0.88	1.66	1.51
Colima.....	0.60		1.39	1.01	1.40	2.82	2.08
Chiapas.....	0.28	1.19	0.88	0.86	1.01	1.45	1.46
Guerrero.....	0.40	0.56	0.72	0.71	0.90	1.96	1.09
Oaxaca.....	0.24	0.56	0.54	0.65	0.76	1.46	1.82
Total Mexico.....	0.40	0.90	0.93	0.94	1.09	1.91	1.66

* Data from Ramón Fernández y Fernández, *Los Salarios agrícolas en 1944* (Mexico City: Secretaría de Agricultura y Fomento, 1946), pp. 8, 9, 22.

1907-10 to 1.91 in 1944. The increase was particularly marked during the eleven-year period from 1933 to 1944. The average wage was 0.68 pesos in 1933 and increased to 1.91 in 1944. Fernández also presents data, however, which indicate that during the period 1936-44 the cost of living increased even faster than did wages. The trends in nominal wages, cost of living, and real wages for farm labor during the entire period from 1891 to 1944 are shown graphically in Figure 22. From this chart it appears that real wages declined rapidly from about 1900 to 1912; after that they increased until 1927, then fluctuated for a few years and declined considerably after 1935. The decline in real wages from 1940 to 1944, despite the rapid increase in nominal wages, is probably due to economic dislocations resulting from World War II.

Farm wages vary greatly from one region to another. This is obvious from Table 50. In the north Pacific region the average wage for farm hands in 1944 was 2.77 pesos. It was only 1.66 pesos in the south Pacific. By states, the variation is from 5.89 in Baja California Norte to only 1.08 in Querétaro. Variations in farm wages by minor civil divisions are plotted in Figure 23. With certain exceptions the areas where commercialized farming tends to prevail correspond roughly to the more darkly shaded areas. The higher wages in most of lower California are probably due to the scarcity of labor in that area; the same is true in Quintana Roo and Campeche.

MIGRATORY FARM WORKERS

Seasonal variations in the demands for farm labor in different areas give rise to the migration of workers from one area to another. This is more likely to be true where farming is highly commercialized and where a one-crop system of farming prevails. Under such circumstances it is often necessary to harvest the entire crop within a few weeks, and there is urgent demand for workers during that particular period of time. In such localities wages are likely to be considerably higher during the rush season in order to attract the necessary workers from other areas. In the winter-vegetable areas of northern Sinaloa and southern Sonora, wages for agricultural laborers reach as high as 4 and 5 pesos per day at certain seasons; but much of this increase in wage is probably absorbed by the workers in transportation expenses from one area to another. In Mexico the principal crops which require large numbers of seasonal workers are cotton, coffee, sugar cane, and vegetables. No adequate study has been made concerning the movements of seasonal workers, of the routes they follow, or of

the problems they encounter.¹¹ Such data would be of great value in planning public policy for the rural areas. Some data were collected by the Mexican Department of Labor and published in the *Year Book* of 1936. These may be summarized as follows:

From July, 1934, to June, 1935, there were about 200,000 agricultural workers who migrated from the municipalities of their residence to other municipalities. The greatest migrations were reported in the states of Chiapas, Guerrero, Nayarit, Oaxaca, Puebla, and Veracruz. The migrations were primarily from the highlands to the lower altitudes for the purpose of working in the crops. The return migrations were from the lowlands to the highlands. In the state of Chiapas, it was reported that during the course of the year 36,000 workers left their municipalities and 29,000 returned. Many of these went from the highlands in the region of Las Casas to work in the coffee-growing areas of the Soconusco, near the border of Guatemala in the southwestern corner of the state. Guatemalan workers also enter this region to pick coffee each year. It is reported that in a few areas of the Republic some villages are almost depopulated at certain times of the year because of these migrations. Thus it is said that sometimes the majority of the population migrates from the region of Amealco in the state of Querétaro to seek work in the vicinity of San Juan del Río of the same state.¹² This migration is said to be most intense during the years when the crops at Amealco are poor. Indians from the mountains of eastern Nayarit regularly migrate to work in the lowlands of that state and in Sinaloa.

GATHERERS OF WILD PLANTS AND FOREST PRODUCTS

In some areas of the Republic there are opportunities for rural families to make their living, or part of it, by gathering wild products from lands where these grow naturally. The census of 1940 listed a total of 8,904,917 hectares of land as being "agriculturally productive non-cultivated" (see Appen. A, Table 1).

Most of this land is probably of the type described above. Some of the ejido youth living in the vicinity of these lands might join the throng of those who roam through the forests or over the prairies and gather wild products. The regions where these gatherers of wild products are most numerous are as follows:

1. *The chicle-producing areas of Campeche, Quintana Roo, Tabas-*

11. For such studies in the United States see Paul S. Taylor, "Migratory Farm Labor in the United States," *Monthly Labor Review*, March, 1937, pp. 537-49.

12. Lira López, Fernández y Fernández, and Olazcoaga, *op. cit.*, p. 40.

co, and Yucatán.—Chicle is derived from the sap of trees, known by the name of *chicozapote*, which grow abundantly on certain parts of the Yucatán Peninsula. The chicle is exported to the United States, where it is made into chewing gum. During the five-year period which ended in 1942, a yearly average of 4,977 tons of chicle was produced in Mexico. In 1942 the production was 6,826 tons. The average annual value of the chicle exported from Mexico during this five-year period amounted to 17,000,000 pesos (about \$3,505,000). During the same period chicle ranked third in value of agricultural products exported from Mexico.¹³

Thousands of persons are engaged in the extraction of sap for chicle. These people live in temporary camps and move from one place to another as the work requires. The production season varies according to weather conditions, being most profitable during the rainy season. Ordinarily, the season lasts about eight months, beginning in July.

The chicle workers come mostly from the surrounding states, although some traverse several states in order to engage in the work. The camps usually consist of males only, since it would be very expensive to take families along because of the frequent shifts from one camp to another. It would also be dangerous to the health of families, since the chicle forests are located in tropical areas, where malaria and other tropical diseases abound. Chicle workers receive higher wages than do farm laborers.

There is need for studies concerning the impact of this type of work upon the social situation. Family members are separated for the greater part of the year, and the husband and father is often gone just when he is most needed at home to give guidance and protection to his family. There is also a need for health studies to determine the influence of this migratory, tropical employment on the health and vitality of the workers.

2. *The areas producing "ixtle" in the states of Hidalgo, San Luis Potosí, and Zacatecas.*—*Ixtle* is a fibrous material made from the leaves of a species of maguey. It is used by the Indians for making ropes, sacks, and coarse fabrics. It is quite common in an area of the state of Hidalgo known as the Valle del Mezquital about eighty-five miles northwest of Mexico City. Driving along the Pan-American Highway near Octopan on Wednesdays, which is market day at Octopan, one may see women hurrying along barefooted, carrying

13. Secretaría de Agricultura y Fomento, "Monografías Comerciales—Chicle," in *Boletín mensual de la Dirección de Economía Rural* (1943), p. 44.

their wares to market and spinning their fabrics as they walk. Many of these people have very low standards of living. Their houses are often one-room shacks made of cactus leaves or unhewn stones piled together without mortar. Their clothing is often ragged. The Valle del Mezquital is one of the most poverty-stricken areas of Mexico. The government has made numerous attempts to improve conditions there and in certain restricted sections has achieved some degree of success.

3. *The areas producing "coquito de aceite" in the states of Nayarit, Colima, Veracruz, and Tabasco.*—Coquitos are nuts which grow in large bunches on the stem of a variety of palm tree and at maturity are slightly larger in size than a golf ball. They contain vegetable oil, and during World War II there was considerable demand for them. They grow wild in certain tropical areas of the above-mentioned states, and many individuals spend their time gathering them. We have no estimate of the number of persons earning their living in this manner.

4. *The areas producing "zacatón" grass in the state of Mexico.*—It is estimated that about 30,000 families in the state of México west of the city of Toluca make their living by digging the roots of zacatón grass and making these into various types of brushes. These products were usually exported to Europe prior to World War II, and, with the vanishing market during the war, these people experienced severe hardships because they were unable to dispose of their products. It is hoped that, with the opening of the channels of international trade, conditions will improve for these workers.

5. *The areas producing palm leaves, which are used for the making of hats in the Mixteca region of Oaxaca.*—It is estimated that about 10,000 families make their living gathering palm leaves and weaving them into straw hats. In certain regions of Oaxaca one may encounter peasants walking along the roads carrying loads on their backs and weaving hats as they walk.

6. *"Candelilla"-producing areas in the semiarid regions of the north.*—Candelilla is a wax substance which is extracted from a small bush which grows in dry areas. From it are made such useful articles as sealing wax and floor wax. It is estimated that about 4,000 workers are employed each year in the gathering of this sparsely scattered product. The bushes are gathered and piled along the railroad tracks, then are loaded onto cars and taken to processing plants.

7. *Guayule-producing areas.*—During World War II many families were employed gathering guayule. This is a small, rubber-producing

shrub which grows in north-central Mexico, particularly in certain parts of the states of Coahuila, Durango, Zacatecas, and Chihuahua. The shrub is rather sparsely distributed and requires from seven to twenty years to mature. Rubber is stored to the extent of about 10 per cent of the dry weight in every part of the plant except the leaves. Processing is rather expensive, and it is doubtful that in normal times it will be very economical to produce.¹⁴

MIGRATION OF FARM WORKERS TO THE UNITED STATES

Migration of Mexican farm workers to the United States has provided an outlet for surplus Mexican workers at various times. Manuel Gamio, writing in 1935, estimated that since 1910 about one million workers from Mexico had gone to the United States and then had returned later.¹⁵ Most of them were motivated to leave Mexico because of the economic distress prevailing in their local communities. They usually found employment in the United States and sent money back to their families in the distressed areas from which they came. Gamio estimates, through the study of postal money orders, that at least 10,000,000 pesos a year were saved by these workers.¹⁶

With the curtailment of employment during the depression years of the 1930's, emigration of Mexicans to the United States practically ceased, and there was a large reverse migration back to Mexico of Mexicans who had been living and working in the United States. World War II created a manpower shortage of farm workers in the United States, and an international agreement was made which authorized the United States government to recruit farm workers in Mexico under regulations imposed by the Mexican government. Some of these conditions and procedures were described by R. C. Jones, of the Pan-American Union, as follows:

Since it was impossible to determine at the time the Agreement was made exactly what number of workers would be needed at various times, the Mexican Government is advised from time to time as to the number of workers wanted and it then determines the number that can be permitted to leave and from what areas they may be drawn. Workers, for example, can only be recruited from certain designated states and areas in Mexico and at such times when it is felt that it would not be detrimental to the Mexican economy. Recruitment in the northern states has been subject to special restriction because there seemed to be a tendency for workers to be drained off in large numbers. At the time of the original Agreement Mexico set a ceiling of 50,000 on the number of workers who could be brought into the United States at one time. This number was raised to 75,000

14. "Desert Rubber," *Inter-American Monthly*, July, 1942, p. 19.

15. *Hacia un México nuevo* (Mexico City, 1935), p. 53.

16. *Ibid.*, pp. 54, 55.

in 1944. The War Food Administration sets a tentative schedule according to which these men are to be recruited and transported. Changes in these schedules have at times been found to be necessary or desirable, as was the case in June, 1944, when a much larger number of men was needed in the beet fields than it had been originally planned to send. The number actually under contract, however, has never equalled the ceiling.

The recruitment phase of the program has proven to be particularly difficult. Although there is a rough selection of men in their home communities there was a tendency for large numbers to congregate in Mexico City in the expectation of being contracted. Charges have been made in the Mexican press that the sale of certificates of eligibility had developed into a sizable black market and early in 1945 three national deputies and a number of government employees were indicted for being involved in such practices.¹⁷

The farm-labor recruiting program in Mexico began in 1942, and, by the end of 1944, 118,471 workers had been brought to the United States—4,203 came in 1942, 52,098 in 1943, and 62,170 in 1944¹⁸ (see Pls. IX and X).

During the time that farm laborers were being recruited, workers were also being drawn from Mexico to work on the railroads. Up to the end of December, 1944, a total of 80,137 Mexican nationals had been delivered to employers for railroad work in the United States. This makes a total of 198,744 workers who left the villages, the ejidos, and the cities of Mexico during the period 1942-44 to work in the United States. They came mostly from the central region, as may be seen from Table 51. The data in this table refer only to the states from which they were recruited and the states to which they returned. These may or may not coincide with the states of permanent residence. The data cover only the period from September 1, 1942, to May 31, 1944. The vast majority (84.1 per cent) were recruited from the central region. The Distrito Federal furnished 31.6 per cent, but, since the Distrito Federal was the chief recruiting center, it seems likely that many who were listed from there actually lived in other states; the state of Michoacán furnished 24.8 per cent; Guanajuato, 14.4 per cent; and Jalisco, 6.0 per cent. The governors of these three states protested at various times that agriculture in their states was being seriously disrupted because of the migration of workers to the United States. Complaints were made by other local officials in various districts of Guanajuato, Michoacán, and Jalisco to the effect that many ejidatarios abandoned their lands to become

17. Robert C. Jones, *Mexican War Workers in the United States—the Mexico-United States Manpower Recruiting Program and Its Operation* (Washington, D.C.: Pan-American Union, 1945), pp. 6, 7.

18. *Ibid.*, p. 24.

TABLE 51

NUMBER OF MEXICAN LABORERS LEAVING MEXICO TO WORK IN THE UNITED STATES AND TOTAL NUMBER RETURNING FROM THE UNITED STATES TO MEXICO, BY REGIONS AND STATES OF ORIGIN*

(September 1, 1942—May 31, 1944)

REGION AND STATE†	TOTAL LEAV- ING MEXICO		TOTAL RETURNING TO MEXICO	
	No.	Per Cent	No.	Per Cent
North Pacific	915	0 7	149	0 3
Baja California N.	42	0 1	8	
Baja California S.	3			
Nayarit.	683	0 5	111	0 2
Sinaloa	83	0 1	18	
Sonora	104	0 1	12	
North	18,115	13 2	1,933	3 6
Coahuila	410	0 3	120	0 2
Chihuahua	366	0 3	51	0 1
Durango	1,438	1 1	150	0 3
Nuevo León	219	0 2	48	0 1
San Luis Potosí	7,718	5 6	171	0 3
Tamaulipas	345	0 3	86	0 2
Zacatecas	7,619	5 5	1,307	2 4
Central	115,541	84 1	51,009	94 9
Aguascalientes	2,287	1 7	353	0 7
Distrito Federal	43,374	31 6	16,619	30 9
Guanajuato	19,848	14 4	10,836	20 2
Hidalgo.	1,285	0 9	355	0 7
Jalisco	8,202	6 0	2,866	5 3
México	3,457	2 5	1,000	1 9
Michoacán	34,069	24 8	18,115	33 7
Morelos.	860	0 6	193	0 4
Puebla . .	653	0 5	209	0 4
Querétaro	1,167	0 9	356	0 7
Tlaxcala	339	0 3	107	0 2
Gulf . .	935	0 7	271	0 5
Campeche	15		6	
Quintana Roo	2			
Tabasco.	134	0 1	25	0 1
Veracruz	685	0 5	204	0 4
Yucatán	99	0 1	36	0 1
South Pacific	1,899	1 4	384	0 7
Colima	383	0 3	84	0 2
Chiapas . .	82	0 1	27	0 1
Guerrero	596	0 4	143	0 3
Oaxaca	838	0 6	130	0 2
Total	137,405	100 0	53,746	100 0

* Data from Dirección General de Estadística.

† "Region and State" refers to those from which the workers were recruited and to which they returned from the United States.

braceros ("farm hands"). Migration to the United States from these three states is not new. Mexican immigrants to the United States studied by Manuel Gamio in 1926 came mostly from Guanajuato, Michoacán, and Jalisco.¹⁹ Ralph L. Beals concluded in a recent study of the Tarascan Indian village of Cherán in the state of Michoacán that

knowledge of emigration is necessary to understand the Cherán population situation. Virtually all the emigration has been to the United States; relatively few persons appear to have emigrated either to other parts of Mexico or to other Tarascan towns. Impressionistically, it would appear that a very considerable portion of the Cherán population has been in the United States. Probably very few families either have not been in the United States or do not have some fairly close relative who is or has been in this country. Too small a sample was taken for statistical data on this point to be valid, but of 28 males interviewed specifically with reference to emigration, 25 had been in the United States.²⁰

The Mexican government officially encouraged the farm-labor program despite any adverse effects which it might have on Mexican agriculture. It was viewed as an important contribution which Mexico could make to the war effort; it was believed that the program would also serve as an educational experience for Mexican workers. It was considered a splendid opportunity for isolated workers to leave their small subsistence farms for a few months and to travel into another country, where a more highly developed agriculture prevailed, in order to observe how other people work and live. It was believed that such experience would be of value to them when they returned to their own communities. Some of the advantages acquired by migrants to the United States prior to 1935 are described by Gamio as follows:

Such persons, who usually emigrated because of the unfavorable economic conditions prevailing in their native region, are mainly of Indian or mixed Indian race and their mental and material standard of living before leaving Mexico belonged to a low cultural level. During their stay in the United States almost all of them improved their economic situation and became accustomed to eating better food, living in cleaner and more comfortable rooms, and wearing clothes more suitable to bodily needs than those they used to wear.

Another achievement consisted in their learning to perform all types of agricultural and industrial work in accordance with more modern and efficient practices, so that in comparison with the workers who have not left Mexico and employ backward methods, these repatriated Mexicans may be justly considered as

19. *Mexican Immigration to the United States* (Chicago, 1930), chap. ii.

20. *Cherán: A Sierra Tarascan Village* (Washington, D.C.: Smithsonian Institution, 1946), p. 98.

specialists or masters in their trade, especially since the stupid or lazy were eliminated.²¹

Finally, it should be mentioned that the farm-labor program brought much needed cash into the isolated rural communities of Mexico. The workers earned much more than ever before, and many of them sent home monthly checks of considerable size. By the end of 1944 farm workers in this program had been paid \$75,000,000 and railroad workers, \$63,000,000. The two groups together had earned \$138,000,000.

The farm-labor recruiting program was obviously temporary in nature and terminated at the cessation of hostilities of World War II. The problem of reabsorbing the returning migrants into Mexico's rural economy now presents itself. Many of them acquired new habits of diet and dress and new ideas concerning agriculture. Some are restless and reluctant to settle down again in the same isolated villages from which they migrated, and some of these are moving into Mexico City. The government is settling some of the returning families in new colonies on lands that have recently been developed. A similar colony was established for repatriated Mexicans several years ago in the vicinity of Matamoros in the state of Tamaulipas. This colony appears to be rather successful and has the advantage of permitting people who have had similar experiences to live near one another so that they may continue to practice their newly acquired ways of living. Gamio's studies seem to show that when returning migrants are dispersed among the general rural population they become discouraged because of the pressure exerted on them by their neighbors to conform to the old ways of living. He says that frequently they either abandon their acquired techniques and revert to the old customs or they migrate to the cities. He feels that if they are settled in agricultural colonies they will retain the benefit of their experiences abroad and that these colonies will serve as demonstration projects for the surrounding communities.²²

The extent to which migration to the United States will serve in the future as a permanent outlet for the surplus rural population of Mexico, as it has in the past, will, of course, depend upon the demand for such workers in the United States. A prolonged economic depression would shut off almost completely the entrance of Mexican workers.

21. Gamio, *Hacia un México nuevo*, pp. 53, 54.

22. *Ibid.*, pp. 55-60.

RURAL ARTS AND CRAFTS

As a further alternative, the surplus ejido population might specialize in rural arts and crafts to be sold in the cities and to tourists. In 1945 there were 250,000 visitors who went from the United States to Mexico and they spent about \$70,000,000 in Mexico. There were also 40,000 visitors from other countries. Part of the money spent by these visitors to Mexico goes into the purchase of rural handicrafts. In many instances the home arts and crafts are supplementary to part-time farming. There are a few areas where specialization has long prevailed. Uruapan, Michoacán, is noted for the artistic lacquer work on *jícaras* or wooden trays; the village of Paracho near Lake Pátzcuaro is noted for making guitars and other stringed instruments; the vicinity of Toluca, México, is noted for basketry. Certain localities specialize in weaving, others in leather goods or pottery. Much of whatever specialization now exists in arts and crafts has been in existence for ages, although in certain areas the workmanship has deteriorated in quality. The size of the tourist business would seem to indicate the necessity for stimulation of the rural arts and crafts in the direction of products that will command a good price; for this reason the products should reflect skilled workmanship. There is also need for conscientious attempts to develop markets for these handicrafts. It has been reported to the author that most of the profits from handicrafts go into the pockets of middlemen and that very little compensation is realized by the peasants who make the articles.

INDUSTRIALIZATION

Perhaps as a final alternative, ejido youth might migrate to the cities and join the growing industrial labor force. Along with the shifts in agricultural production has gone an increase in the amount of industrial production. This has been stimulated by a number of factors, among which was the flight of the big landowners to the cities. Prior to the accelerated agrarian program of the 1930's, the customary form of investment for anyone in Mexico with cash to spend was the purchase of a large farm—not that there was much money to be made in farming with the techniques generally practiced, but the investment seemed more safe in the ground than in banks or in other assets. When wholesale expropriation of land began to take place and made farm land a precarious form of investment, the large landowners salvaged what assets they could and fled to

such cities as Mexico City, Guadalajara, or Monterrey. They invested their savings in real estate, industry, and commerce.

Such data as are available concerning industrial trends are given in Table 52 in the form of indices by years, with 1929 equaling 100. The general index is composed of four groups of products, including textiles, food products, construction, and wearing apparel and cleansing products. According to these indices, general industrial produc-

TABLE 52
INDEX OF THE VOLUME OF INDUSTRIAL PRODUCTION
IN MEXICO, BY YEARS*
(1929 = 100)

Year	Volume of Production	Year	Volume of Production
1893.....	56.9	1919.....	55.3
1894.....	54.4	1920.....	53.6
1895.....	85.8	1921.....	52.7
1896.....	97.5	1922.....	71.8
1897.....	49.0	1923.....	81.5
1898.....	49.8	1924.....	85.6
1899.....	35.5	1925.....	87.6
1900.....	58.7	1926.....	99.4
1901.....	47.1	1927.....	90.1
1902.....	49.7	1928.....	94.4
1903.....	54.1	1929.....	100.0
1904.....	56.4	1930.....	105.3
1905.....	50.5	1931.....	105.2
1906.....	68.1	1932.....	90.8
1907.....	68.3	1933.....	84.1
1908.....	67.7	1934.....	125.4
1909.....	72.7	1935.....	122.0
1910.....	69.1	1936.....	140.1
1911.....	65.3	1937.....	146.0
1912.....	53.0	1938.....	152.8
1913.....	61.4	1939.....	160.5
1914.....	45.8	1940.....	165.2
1915.....	54.9	1941.....	179.8
1916.....	50.5	1942.....	199.9
1917.....	46.0	1943.....	202.0
1918.....	43.7	1944.....	212.2

* Data from Oficina de Barómetros Económicos, Secretaría de la Economía Nacional.

tion increased from 56.4 in 1904 to 212.2 in 1944. These indices should be used with caution, however, since, in some cases, they can be little more than rough estimates. This is particularly true for the early years and also for the period of the Revolution, 1910-20. Separate indices for each group of products are given for the period 1929-44 in Table 53.

During that period the index for textiles rose to 190.1; that for food products to 251.1; construction rose to 232.4; and wearing apparel to 129.8

Tourists from the United States, of whom there were 250,000 in

1945, are stimulating the building of hotels and highways. Conditions growing out of World War II have further stimulated industrial development. Money entered the country from the United States for the purchase of war materials; laborers who went to the United States to work sent back savings to their families. Early in 1941, the government offered inducements in the form of exemption from taxes and import duties for a period of several years to anyone establishing new industries in Mexico. Encouragement was given to

TABLE 53
INDEXES OF THE VOLUME OF INDUSTRIAL PRODUCTION
IN MEXICO, BY YEARS, 1929-44*
(1929 = 100)

Year	General Industrial Production	Textiles†	Food Products‡	Construction§	Wearing Apparel and Cleansing Products||
1929.....	100.0	100.0	100.0	100.0	100.0
1930.....	105.3	107.4	107.9	.....	89.4
1931.....	105.2	99.9	118.0	.....	100.0
1932.....	90.8	97.6	83.7	.....	91.8
1933.....	84.1	114.7	87.6	.....	119.0
1934.....	125.4	143.4	98.5	131.5	189.3
1935.....	122.0	129.1	107.2	121.1	165.1
1936.....	140.1	143.7	129.3	127.8	187.9
1937.....	146.0	145.7	138.3	150.2	165.6
1938.....	152.8	145.8	152.6	156.8	160.2
1939.....	160.5	146.8	167.8	169.9	151.4
1940.....	165.2	146.2	173.6	197.8	150.7
1941.....	179.8	161.6	183.6	211.4	152.4
1942.....	199.9	171.8	216.9	267.8	153.0
1943.....	202.0	183.6	219.8	229.5	133.3
1944.....	212.2	190.1	251.1	232.4	129.8

* Data from Oficina de Barómetros Económicos, Secretaría de la Economía Nacional.

† Cotton, wool, and rayon textiles and knitted goods.

‡ Wheat-mill products, beer, preserved foods, and vegetable oils.

§ Iron and steel, cement, and flat glass.

|| Shoes and soap.

foreign capital, and investors from the United States crossed the border to invest in Mexico, thus escaping from increased taxes in the United States. These factors contributed to a veritable business boom. The author witnessed entirely new residential suburbs spring into existence around Mexico City from 1942 to 1945.

At the present time there is a great deal of emphasis on industrial production as a "way out" for Mexico. The government is pledged to stimulate and encourage it in every way possible. President Miguel Alemán has included industrialists and businessmen in his cabinet and has pledged his government to work for industrialization. Thus it would appear that, while much of Mexico's future development

will depend on the relative success or failure of the ejido system, this is certainly not the only way out. The industrial revolution is at last beginning to take hold and can be expected to gather momentum; it appears to offer the greatest hope for the employment of the surplus ejido population.

THE PROBLEM OF SOIL CONSERVATION

One of Mexico's most serious problems in connection with her rural economy is that of soil erosion. In an address at a recent conference at Princeton University, H. H. Bennett, chief of the United States Soil Conservation Service, explained the problem clearly in stating that productive land is different from other natural resources. Soil is a resource that must be maintained and used simultaneously. Said he:

Productive land is much more limited than commonly has been supposed. It is not permanent. Once the fertile topsoil is washed or blown away it cannot be restored or replaced in any practical way for generations. There are no undiscovered reserves of productive land of any substantial area. We cannot dig deeper into the earth and find new productive soil. We cannot pump it from wells, plant it with seeds, or dig it from mines. We must keep what we have or do without, for when soil has been washed or blown away into the oceans it is not recoverable. Productive land is the only natural resource without which we cannot live. To protect our source of food, then, the only sensible, practical thing to do is to protect the productive land we now have.

As indicated in chapter i, much of Mexico's surface is more or less mountainous or sloping. Only about one-third can be classed as somewhat level. On many of the slopes row farming is practiced. The crop rows are planted in more or less vertical fashion, running up and down the slope; there is relatively little terracing or contour farming. During the rainy season these vertical rows lead to the formation of gullies and the washing-away of the topsoil. Good farm land is so scarce in some areas that the Indians have to plant their crops on the steep mountainsides. When the soil washes away from one strip, leaving the bare surface rock exposed, they shift to another spot, where they proceed to cut down the vegetation from the hill-side; thus the process begins all over again. Some of Mexico's soil specialists have estimated that 12 per cent of the plains and 30 per cent of the steep lands have been made totally unproductive by erosion.²³

23. Phoebe O'Neill Faris, "Mexico's New Soil and Water Conservation Program," *Agriculture in the Americas*, November, 1946, pp. 175-78.

In order to witness evidences of soil erosion in all stages of development, one need but drive over Mexico's highways. When traveling by automobile from Mexico City to Guadalajara the motorist is seldom out of sight of soil erosion. In the western part of the state of México he will observe large areas in which the topsoil has been completely washed away. From the highway between Mexico City and Laredo, in the vicinity of Tamazunchale, the motorist may observe land which is being farmed on steep mountains with no terracing whatsoever. Unless something is done to change these practices, the mountains in this vicinity may soon be devoid of vegetation (see Pl. XI).

The state of Tlaxcala is one of the most eroded areas in Mexico. Erosion is most serious in the vicinity of the volcano of Malinche. This volcano has an altitude of 14,640 feet and around its base are distributed a large number of villages. The inhabitants of these villages have traditionally made part of their living through the sale of charcoal, which they burn from wood cut from the slopes of this mountain. The slopes at the base of this volcano are now becoming devoid of vegetation. In a recent study of the area by members of the Soil Conservation Service of the Mexican Department of Agriculture the following conclusion was reached: "This investigation leads to the conclusion that the problem of erosion in the state of Tlaxcala is so grave that if it is not remedied promptly, within a period of 50 years many of the present inhabitants of the region will have been forced to emigrate to other areas."²⁴

Closely related to the problem of soil conservation is that of conservation of the forestry resources. At the present time the peasants have little or no comprehension of the necessity for sound practices which would insure against deforestation, and in many instances they cut down timber indiscriminately as a means of supplementing their income by selling the wood or charcoal. This practice is especially serious in the vicinity of Mexico City into which many tons of charcoal are delivered daily. In many areas the peasants have the regular custom of burning off their lands every spring. This practice is, of course, disastrous for the young trees. A further custom which tends to destroy thousands of trees is that of slashing into the trunks with machetes for the purpose of securing splinters of pitch-pine fagots to be sold in the city markets as torches for kindling fires in the charcoal burners.

24. Lorenzo R. Patiño, "La Importancia de la conservación del suelo," *Irrigación en México*, XXIV, No. 6 (November-December, 1943), 12.

It was reported in 1944 that destruction of forests was taking place even in the national parks:

The National Parks were established, among other things, for watershed protection. Yet sawmills exist in the Cofre de Perote, Ixta-Popo, and Boschncheve parks. There is probably not a forested park in the Republic where there is not clandestine cutting, charcoal burning, etc. In almost every park, over-grazing, and repeated burning combine to kill almost all young trees. Timber stands may be fifty or sixty years old and *there is nothing to replace them*. When such conditions exist in National Parks, where there is supposed to be no exploitation, it scarcely seems likely that commercially worked forests are in better condition.²⁵

Obviously, when the hillsides are stripped of vegetation by the chopping-down of trees and by overgrazing, the rain water runs off rapidly, cutting gullies, carrying away the topsoil, contributing to floods, and leaving the area on which it fell about as dry as before the rain came. Furthermore, the rapid runoff tends to fill the lakes and ponds with sand and thus to destroy many of the new facilities which Mexico has for storing water. Many reservoirs that were constructed in colonial times are now completely filled with sand.²⁶ Some of the modern irrigation projects recently constructed at great expense are in danger of being filled with silt unless steps are taken to prevent the torrential floods in the streams above them.²⁷

To what extent the soil-erosion problem and the destruction of forests have been aggravated by the agrarian program we are unable to say, since there are no scientific data with which to answer the question. No adequate studies have been made of soil erosion either before or since the agrarian program got under way. Much of the erosion that is now so evident gives signs of having begun long before the ejido program started. There is little evidence that the hacendados were concerned about soil erosion. Serious as soil erosion was in the days of the hacienda, however, it has probably become accelerated as a result of the land-redistribution program. This opinion is based on personal observation and on numerous interviews with persons connected with the ejido program in all parts of the country. It is also shared by the head of the Mexican Soil Conservation Service. This conclusion is based on the following reasoning.

Landownership and the control of its use were formerly concentrated in the hands of a relatively few individuals. With large areas of land under his control it was relatively easy for the administrator of an hacienda to shift production from one area to another if this

25. William Vogt, unpublished manuscript, p. 11.

26. Patiño, *op. cit.*, p. 6.

27. *Ibid.*

seemed advisable.²⁸ As a result of the agrarian program, ownership and control of the use of the land was pulverized to the extent that hundreds, or in some cases even thousands, of small farm operators replaced a single large operator. These thousands of new operators had received no training or experience that would qualify them for responsible proprietorship. Most of them had served all their lives as peons with no responsibility for the enterprise except to obey orders. The division of the large estates into small plots restricted the freedom of the operator to shift his production from one tract of land to another. When all he has is a few hectares of farm land, the ejidatario must plow and plant the same areas year after year. That this is exactly what happens is indicated by the fact that, whereas in 1930, 51.1 per cent of all crop land was left fallow, in 1940 only 25.7 per cent of the ejido crop lands was left fallow. Furthermore, much of the land on steep slopes that was used as pasture by the hacendados was plowed up after being allotted to ejidatarios. Much of this should have remained as pasture; placing it under cultivation tended to accelerate the process of erosion. Likewise, in some areas woodcutting seems to have been accelerated on some of the timbered lands after these were given to the ejidatarios. This is because wood and charcoal provide a ready source of cash to the ejidatarios, who are usually in dire need of it.

Mexico is aware of the soil-erosion problem and in 1942 initiated a Soil Conservation Service designed to counteract it. A budget of 100,000 pesos was allotted in 1943, and one district was marked off as a soil-erosion district. Experiments and demonstrations were conducted there to demonstrate the feasibility of control measures. So effective were these demonstrations of what might be done to protect Mexico's soil resources that in 1944 the budget was increased to 550,000 pesos and five districts were designated. Since that time the service has been elevated to the status of a division within the Secretariat of Agriculture, and ten conservation districts have been established, covering most of central Mexico.

The Mexican government enacted new legislation concerning forestry practices in 1944.²⁹ This legislation gives the Secretariat of Agriculture and Development the right to declare forest reserves, protection zones, and national or international parks. It permits the drawing-up of rules and regulations governing the use of these areas

28. This does not mean that he always did so.

29. Published in the *Diario oficial* of June 20, 1944.

tices. Much of this guidance, to be effective, must be of a demonstrational nature. It is necessary to demonstrate to him the superiority of the more efficient techniques with concrete illustrations that he can readily understand. He has not as yet developed educationally to the point where printed matter is of much value to him. He must first learn to read and write. Even then, it is unlikely that he will learn much about farming from the printed word. There is no substitute for concrete demonstration. The Mexican government has not yet developed an agricultural extension service. It has been too busy with other programs, such as expropriating land, organizing ejidos, and establishing credit; and the financing of an extension service that would reach into the isolated rural communities on a national scale would be expensive. We have noted that the Ejido Bank performs a modified form of extension service for the ejidos with which it operates, and we shall see later that the Department of Cultural Missions of the Secretariat of Public Education also performs an extension service to a limited number of communities. Nevertheless, these agencies reach only a small fraction of the ejido population. The vast majority receive little or no guidance. They do not realize that their methods of farming are resulting in the depletion of their soil. They see muddy water rush down over their fields, leaving deep gullies behind so that they may have to move on to another patch the following year; but they are more likely to view this as an act of God which they are helpless to avert than as an event which could be prevented by following suitable agricultural procedures. How are they going to learn except through patient and careful demonstration by those who have already been fortunate enough to acquire such knowledge?

Little is known in the isolated districts about seed selection for improving the quality of the crops. Cases have been reported wherein the Indians select the better-formed ears of corn to sell because they command a better price than the scrawny ears. The latter are kept for seed because they have a lower sales value. The rural population generally is not aware of the existence of better varieties of seed or of crops more adaptable to their particular regions. The Mexican Secretariat of Agriculture, in co-operation with the Rockefeller Foundation, is now doing some interesting work in seed selection in certain areas of the Central Mesa. This may result in considerable improvement in local areas. The Secretariat of Agriculture also has recently established eleven federally supported agricultural experiment stations in various parts of the country. Most of these have been

established within the past few years, however, and it is too early to evaluate their work. They certainly are a step in the right direction, and they may become important centers from which improved agricultural practices could radiate to the surrounding districts.

Fortunately, the basic settlement pattern of Mexico, wherein the rural inhabitants live in compact village communities, will be favorable for the development of extension programs. Compact communities will facilitate groupings for discussion purposes, for lectures, or for demonstrations of improved techniques in farming, homemaking, and health education.

The challenge will be to devise programs that will fit the needs of the local inhabitants; that will gradually lead them to accept more efficient techniques and practices; and that will avoid introducing changes so suddenly that the social equilibrium will be thrown out of balance and result in the creation of new problems as the old ones are being solved.

PART III

Standards and Levels of Living

Housing

THERE probably is no more serious problem affecting the health and vitality of the rural population of Mexico than that of housing. For this reason a separate chapter is devoted to this topic and is basic to the chapter on health and mortality.

President Avila Camacho stated the situation forcefully in an address to the Society of Mexican Agronomists: "The home prepares man for the struggle and the majority of Mexican homes are *Indian* in their domestic economy. The words 'Indian in their domestic economy' bring to the fore a stark reality and indicate our most pressing duty."¹ This statement appears to be fully substantiated with respect to housing, since a recent housing census conducted on a national scale classifies 45 per cent of all dwellings in Mexico as huts and hovels (*jacales, chozas y barracas*). This housing census (*Segundo censo de edificios*) of 1939 provides the most important data available on a national scale concerning housing. It included the entire nation, and the coverage was fully as great as the population census of 1940. In fact, the housing census recorded a few more inhabitants than did the population census.² The difference is attributed to the fact that every person in Mexico at the time was supposedly included in the former, whereas the latter was concerned only with the resident population.

TYPES OF DWELLINGS

The census classified all dwellings in Mexico into three broad categories of (*a*) huts and hovels (*jacales, chozas y barracas*), (*b*) private dwellings, and (*c*) hotels and apartment houses. Since hotels and apartments are found mostly in the larger cities and towns, only the first two types will be discussed here.

1. Manuel Avila Camacho, *Address to the Mexican Agronomists* (Mexico City: Agencia Editora Mexicana, 1941), p. 20

2. The population census of 1940 recorded a total of 19,653,552 inhabitants; the housing census recorded a total of 19,745,488.

HUTS AND HOVELS

Obviously, the distinction between a hut or hovel and a house would, in many cases, be very difficult to make. One category would merge gradually with the other without any clear-cut dividing line. Undoubtedly, borderline cases were arbitrarily classified into one category or the other by the enumerator. In general, however, the huts are very small, rudely constructed, primitive shelters made of any materials which happen to be readily accessible. In the Central Mesa they are frequently made of loose stones piled one upon another and covered over with thatched roofs of straw, sticks, or leaves. Often the walls are made with upright poles or with crude adobes. In certain areas where the cactus, especially the nopal, is plentiful, the entire structure may be made of cactus stalks and leaves. These are fairly common in the area known as the "Valle del Mezquital" in the state of Hidalgo. In the tropical areas and near the seacoasts they are usually constructed of poles arranged vertically and lashed together with vines. The roofs in these areas are nearly always of thatch. In some areas, especially in the Yucatán Peninsula, a rather elaborate framework is made of poles lashed together for the support of both walls and roof.³

The hut usually consists of a single small room, although in some areas a lean-to is attached, which serves as a kitchen. Often the cooking is done over an open fire outside the hut or in a corner of the one-room structure. There is never a chimney or flue through which the smoke might escape, and, when one passes by early in the morning or in the early evening, smoke may be seen exuding from the entire surface of the roof. The eyes of the occupants of such structures are often red and show signs of irritation from the smoke. The floors are nearly always of dirt.⁴ Where water is available, the dirt floor is sprinkled at frequent intervals to give it a packed surface. There are no windows, and the only opening is the doorway, except for the interstices between poles or stones, which in the highland areas happen to be altogether too plentiful, especially in windy, rainy, or cold weather. Huddled into such makeshift structures live 40.4 per cent of the inhabitants of Mexico (Appen. A, Table 29).

Of all the dwellings in the Republic, 44.9 per cent are classified in Mexico's housing census as huts (Appen. A, Table 30). In the munic-

3. Robert Wauchope, *Modern Maya Houses—a Study of Their Archaeological Significance* (Washington, D.C., 1938).

4. In Yucatán they are frequently constructed with a mixture of lime and marl known as *embutido*, which gives a hard surface (*ibid.*, p. 15).

ipalities where there are no urban inhabitants, 58.8 per cent of the dwellings are of this variety (Appen. A, Table 31). The geographical variation is more clearly illustrated in Figure 24. The largest proportion is found in the southern parts of the Republic. In the four states of Chiapas, Guerrero, Oaxaca, and Tabasco, these structures constitute 65 per cent or more of all dwellings. The smallest proportions are found in the northern states and in the Distrito Federal. The wide-



FIG. 24.—Percentage of all dwellings in Mexico which consist of huts, by states. Based on Appendix A, Table 30.

spread distribution of this primitive structure serves to emphasize the magnitude of the housing problem (see Pls. XII and XIII). It is true that it is more common in the tropical areas, where less shelter from cold weather is needed, but, unfortunately, it is not confined to these areas. Much of Oaxaca, Guerrero, and Chiapas is mountainous, and during certain seasons of the year it gets uncomfortably cold, especially after the sun goes down. The fact that on the Central Mesa, where freezing weather sometimes occurs in the winter months, nearly two out of every five dwellings is classified in the housing census as a hut (38.7 per cent), even including large cities, probably accounts in part for the extremely high rate of pneumonia found in this region (chap. xiv).

SINGLE-FAMILY DWELLINGS

The second major group of dwellings, as classified by the housing census, consists of *casas solas* or single houses (see Pl. XIV). This

category does not refer exclusively to single-family *detached* houses, but only to the fact that the structure is considered a house in contradistinction to a hut and that it is intended to accommodate only one family, however large or small that family might be, as contrasted with an apartment house or boarding-house. In most Mexican villages and towns the houses are attached one to another in long rows fronting an entire block (see Pl. IV). The detached dwelling is ordinarily found only on the outskirts of a village or town or on isolated ranches.

The vast majority of the houses (as distinct from the huts) are made of adobe, although in certain areas, such as the highlands of Chiapas, they are frequently made of small poles arranged horizontally and plastered with mud. The roofs are usually flat, although sloped, shanty-shaped roofs are not uncommon. The gable roof is seldom seen except in a few of the larger cities or resort areas. Frequently the roofs are covered with tile.

Only 53.6 per cent of all dwellings in Mexico are classified by the housing census as houses, and in the strictly rural municipalities only 41.1 per cent. Even this label does not mean, however, that they are either conveniently or healthfully arranged. Many of them are little better than the huts except that their walls are thick and their roofs are tight and they serve as more adequate protection against the weather. Usually the only aperture to the house in the rural districts is the doorway. As in the huts, there are seldom any openings that would serve as windows and, even when they do exist, they are often boarded up or filled in with adobes. Chimneys are usually nonexistent, except in the better homes, and cooking is done over an open fire, with the smoke pervading every nook and corner of the house. Most of the houses have no floors except dirt. Domestic animals, especially chickens, pigs, and dogs, run loose about the yard, and among the poorer homes they are not infrequently sheltered in the same room with the family at night.

The huts are considerably more congested than are the houses. According to the census there are, on the average, about five persons living in each occupied hut and 5.4 in each occupied house; but the houses are, on the average, considerably larger than the huts. Unfortunately, the only available measure of size is the number of rooms, and there was no clear-cut definition in the census instructions as to what constitutes a room. There is reason to believe that any compartmentalized division was called a room, whether clearly partitioned off or not. It is likely that the small lean-to frequently attached

to a jaeal or house and used as a kitchen was also counted as a room. In most cases this lean-to has merely a covering of brush for shade and is completely open on two or three sides. The number of rooms per hut was reported as 1.5. This would imply that about half the huts (usually consisting of a single room) had kitchen attachments and half did not. Counting these lean-tos as rooms, the average number of persons per room in the huts would be 3.2.

The houses are reported to have an average of 2.3 rooms, and on this basis would have an average of about 2 (1.9) persons per room. These figures are for the country as a whole and would include the large urban dwellings and old hacienda buildings. Ordinary rural families would be much more congested than these figures imply.

The foregoing characteristics do not apply, of course, to the owner's house on an hacienda or to the homes on the larger ranches. These are generally constructed in Spanish architectural style, with the four sides surrounding a patio. There is usually ample window space, and there are plenty of rooms. The floors are constructed of wood or tile. The walls, which are of adobe and usually several feet thick, serve to give coolness in the summertime and warmth in winter. Many of the old haciendas contained elaborate flower gardens, together with beautiful old trees and a wide variety of shrubs. A large number of these former hacienda buildings now lie in ruins. In some cases the owner fled to the city for safety during the Revolution, and his entire property was taken over by the agrarians. Usually the latter were accustomed to living in small jaeales and had no particular use for the huge principal buildings. These were allowed to run down and fall into decay. In other instances the former hacendado was left but a hundred hectares of land together with all his buildings and did not consider it worth while to keep the buildings in repair. In a number of the central states, such as Querétaro, Michoacán, and México, the landscape is dotted with the ruins of these old hacienda buildings, which now serve only as monuments to a system of rural social organization in Mexico which has largely passed into history.

HOUSEHOLD CONVENIENCES

There is little in the Mexican peasant home that could be called a household convenience, judged by any modern standards. Rarely are there any stoves. There are few tables or chairs, and there are comparatively few beds in relation to the number of inhabitants, although there are exceptions to this statement, of course. Conven-

iences and equipment are much more likely to be found in northern Mexico than in the central or southern sections of the country, and the homes of the owners or managers of large ranches and farms are likely to be well equipped. In general, however, President Avila Camacho's label of "Indian" would seem to be a fairly appropriate indication of the types of household equipment available in the majority of Mexico's rural houses.

KITCHEN EQUIPMENT

As stated previously, the kitchen frequently consists of a lean-to placed against the side or end of the main hut or house; often, however, it is merely a corner of the only room in the house. While kitchen equipment varies with the income and social position of the family, in many regions it does not differ greatly from that in the village of Tepoztlán in the state of Morelos, described by Redfield as follows:

The kitchen is the center of domestic activity, and around it cluster most of the accessories. Four features are inevitably present in all houses, of whatever poverty or pretension. These four features vary hardly at all in form or position, and preserve, hardly modified at all, pre-Columbian form and function. These four are the hearth, the griddle, the grinding-stone, and the pot. The hearth (*tlequil*)⁵ is sometimes no more than three stones set in a triangle to support the griddle; but more often it is of many stones, plastered, and horseshoe shaped. Upon it fits the griddle (*comal*), a flat, circular tray, which occurs in only one diameter (about eighteen inches). Although griddles of iron are common in the cities, in Tepoztlán they are always of clay. When not in use, the griddle stands on edge at the back of the *tlequil*. The three-legged grinding-stones (*metate*) with their long handstone (*metlapil*) are of the well-known pattern. They are of andesite. The pot in which the maize is cooked (*olla de nixtamal*) stands beside the hearth.⁶

Usually the cooking is done on a wood fire, but it is not uncommon in certain districts to find the *brasero* ("brazier") in which charcoal is burned. In neither case is there any chimney for the smoke. The fire is raised only a few inches off the ground, and the woman in preparing meals usually sits or kneels on the ground in front of the hearth (see Pl. XV).

Other kitchen articles which are commonly found are the mortar and pestle for grinding chile, one or more baskets, and a few pots made of pottery. There is seldom any running water in the house. It is usually carried in pots, sometimes in five-gallon tin cans, from central

5. Nahuatl terms have been omitted from this quotation unless taken over into Spanish.

6. Robert Redfield, *Tepoztlán—a Mexican Village* (Chicago, 1930), p. 35.

watering places at a stream or pool, frequently at considerable distance from the house.

BEDS

Only about three out of five persons in Mexico sleep in what would ordinarily be called beds or cots (Table 54). Nearly one out of every four persons sleeps on the ground or floor, and one out of eight sleeps on what is known as a *tapexco*. This is a platform, usually made of boards or bamboo poles, so that the individual is not directly on the ground. Ordinarily, the *tapexco* would contain no bedding save for a straw mat on which to lie and a blanket for a covering. Hammocks are used for sleeping purposes by 2.7 per cent of the

TABLE 54
POPULATION OF MEXICO CLASSIFIED ACCORDING TO TYPE OF
BED USED, BY SIZE OF COMMUNITY*

TYPE OF BED	TOTAL NUMBER OF INHABITANTS		SIZE OF COMMUNITY			
			Localities of over 10,000 Inhabitants		Localities of 10,000 or Less Inhabitants	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Cot or bed	12,010,295	61.1	3,814,230	88.5	8,196,065	53.4
<i>Tapexco</i>	2,514,626	12.8	72,237	1.7	2,442,389	15.9
Hammock	534,959	2.7	131,817	3.1	403,142	2.6
Sleep on ground or floor . .	4,593,672	23.4	289,956	6.7	4,303,716	28.0
Total	19,653,552	100.0	4,308,240	100.0	15,345,312	100.0

* Data from *Sexto censo de población (1940)* (Dirección General de Estadística).

population and are found mostly in the more tropical areas, especially on the peninsula of Yucatán. In these warmer climates it is claimed that it is more comfortable to sleep in hammocks than in beds. Business and professional persons, even in the cities of Tabasco, Campeche, and Yucatán, have told the author that they customarily sleep in hammocks because they are much cooler and more adapted to the climate. The proportion of persons who customarily sleep on the ground or floor is much greater in the rural than in the urban communities. In localities with less than 10,000 inhabitants, 28.0 per cent of the population sleep on the ground or floor as compared with only 6.7 per cent for the cities with more than 10,000 inhabitants.

The regional variations in the distribution of beds among inhabitants living in localities with less than 10,000 inhabitants are given

in Appendix A, Table 32. Beds appear to be much more common in the north and the north Pacific regions; sleeping on the ground or floor is more characteristic of the central region; sleeping in hammocks is characteristic of the Yucatán Peninsula; and sleeping on *tapexcos* is somewhat more common in the south Pacific region than elsewhere.

HEAT AND LIGHT

In the absence of windows most peasant homes are dark on the inside, even in the daytime. About the only artificial light available is from small tallow candles, and these are not used extensively in the poorer homes. Probably because of the lack of light, most rural families retire to such beds as they have soon after nightfall. They are glad to be up and around at daybreak. The only source of heat usually available is an open fire either in the kitchen corner or in front of the jacal. There are seldom any fireplaces designed for heating rooms or any stoves or any heaters. These are unnecessary in the tropical areas, but in the highlands and in the Central Mesa, where most of the rural people live, the absence of heat in the poorly constructed dwellings may result in serious discomfort and illness.

DRINKING WATER

One of the most serious problems in Mexico and one which directly affects the health of a large proportion of its inhabitants is the lack of drinking water. In large sections of the country, water of any kind is very scarce, and pure water is almost nonexistent. In the author's opinion, much of the ill health among the rural population might be attributed to the drinking of contaminated water.

The unavailability of drinking water is vividly portrayed in the housing census of 1939 (Table 55). More than half the inhabitants of Mexico (56.6 per cent) live in houses where no drinking water is available. This proportion varies among the different regions from 51.3 per cent in the Gulf states to 73.4 in the south Pacific region. In none of the major regions does the proportion of the population without drinking water fall as low as 50 per cent, and in only eight of the thirty-two states and territories (Fig. 25) is the percentage below 50. In eight states more than 65 per cent of the inhabitants are reported living in dwellings without drinking water.

The scarcity of drinking water is much more serious in the rural areas than in the urban. Of all the buildings censused in municipalities having no urban centers, 72.4 per cent were without drinking

TABLE 55

PERCENTAGE OF TOTAL POPULATION OF MEXICO LIVING IN HOMES THAT HAVE NO DRINKING WATER, BY REGIONS AND STATES*

Region and State	Without Drinking Water	With Drinking Water
North Pacific.....	56.4	43.6
Baja California N.....	17.5	82.5
Baja California S.....	59.0	41.0
Nayarit.....	76.6	23.4
Sinaloa.....	56.5	43.5
Sonora.....	51.2	48.8
North.....	56.2	43.8
Coahuila.....	52.0	48.0
Chihuahua.....	57.0	43.0
Durango.....	57.6	42.4
Nuevo León.....	39.0	61.0
San Luis Potosí.....	64.8	35.2
Tamaulipas.....	53.0	47.0
Zacatecas.....	66.7	33.3
Central.....	53.5	46.5
Aguascalientes.....	37.4	62.6
Distrito Federal.....	10.6	89.4
Guanajuato.....	61.1	38.9
Hidalgo.....	75.9	24.1
Jalisco.....	57.1	42.9
México.....	60.7	39.3
Michoacán.....	73.0	27.0
Morelos.....	63.7	36.3
Puebla.....	60.5	39.5
Querétaro.....	65.9	34.1
Tlaxcala.....	46.0	54.0
Gulf.....	51.3	48.7
Campeche.....	30.8	69.2
Quintana Roo.....	51.1	48.9
Tabasco.....	41.9	58.1
Veracruz.....	59.2	40.8
Yucatán.....	31.3	68.7
South Pacific.....	73.4	26.6
Colima.....	58.2	41.8
Chiapas.....	82.6	17.4
Guerrero.....	66.9	33.1
Oaxaca.....	72.3	27.7
Total.....	56.6	43.4

* Data from *Segundo censo de edificios* (1939) (Dirección General de Estadística).

water. The proportions varied by regions from 64.2 per cent in the Gulf states to 77.9 in the south Pacific area (Appen. A, Table 33).

Even where drinking water is reported as being available, one should not assume that it is safe to drink. The enumerators made no tests. They merely recorded the answers of the householders as to whether or not a source of drinking water was available at the house. Rural families in Mexico generally have never heard of bacteria, and they would be likely to answer affirmatively if any water at all were

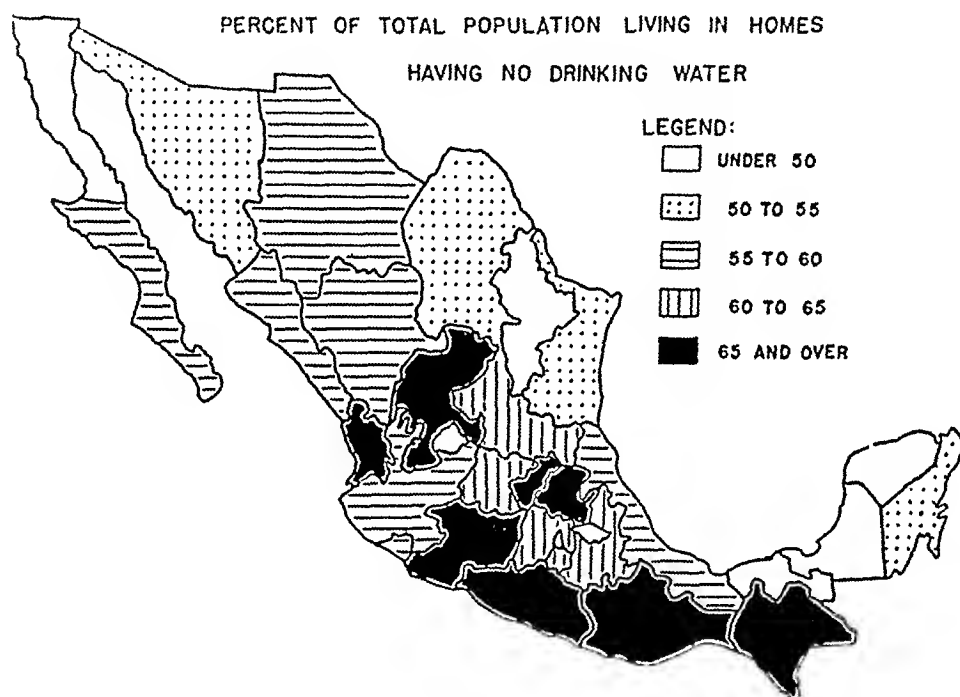


FIG. 25.—Percentage of total population living in homes having no drinking water, by states. Based on Table 55.

accessible, unless the taste of it were so foul as altogether to preclude drinking it. In this connection a group of young progressive physicians from Mexico City who had been spending a series of week ends at Camohmila, a Young Men's Christian Association camp and rural reconstruction center near the village of Tepoztlán, Morelos, were persuaded to hold a series of free clinics at Tepoztlán on Sunday afternoons. Each session was preceded by a lecture and demonstration. For use at one of these demonstrations the physicians took along their microscopes; then they called various people from the audience asking them to get some of their regular drinking water and to look at it through the microscope. The people were utterly astounded at the large number and variety of live animals they could see crawling

around in what they thought was pure water. The water was then boiled, and the audience viewed it again through the microscope, noting the difference. This provided an excellent occasion for a lecture on the necessity of boiling all water used for drinking purposes. Unfortunately, such demonstrations are rare and reach only a fraction of Mexico's population. The large majority would never believe that their drinking water contained animals invisible to the naked eye. The statistics from the housing census presented above, which indicate that 56.6 per cent of Mexico's population have no drinking water, are probably conservative and really understate the magnitude of the problem. Many of the remaining 43.4 per cent drink water that would be readily condemned under any scientific test. Most Mexicans who learn about the widespread pollution of water refuse to drink any water. It is partly for this reason that the use of intoxicating beverages is so prevalent in Mexico. More recently the use of soft drinks has become an established practice, especially among the middle and upper classes. Many families in the cities buy Coca-Cola or Pepsi-Cola, several cases at a time, and children and grown-ups alike drink it regularly in place of water.

The Secretariat of Social Assistance and Health is fully aware of the lack of drinking water. In 1940 the budget carried an appropriation of 1,500,000 pesos for providing drinking water and drainage. In 1946 the amount allotted for this purpose reached 42,000,000 pesos.⁷

BATHS

Rural homes in Mexico generally are not equipped for bathing. In some areas periodical bathing of the entire body is an established custom, but in other areas it is not. The scarcity of water in some areas would discourage such a practice, even if it were considered advisable. This is the case in the Valle del Mezquital near Mexico City.

Such bathing as is practiced is usually performed in the streams or pools. The Mayan Indians of Yucatán are said to bathe frequently, even though this may be only a sponge bath. They change their clothes often and present a clean appearance. In certain parts of the Central Mesa the old Aztec steam bath (*temazcal*) is still in existence and regularly used. The *temazcal* is a small, separately constructed sweathouse made of stones set in mortar. It is rectangular in form, with an oval-shaped roof. It has two chambers, in one of which is built a fire, over which water is poured to produce steam which fills the second chamber. This second chamber is larger than the first and

7. *Hispano americano*, August 30, 1946, p. 31.

will admit the entrance of one or more individuals crawling on hands and knees. In this chamber the individual lies on boards, absorbing the steam. The *temazcal* has both a ceremonial and a therapeutic use, as well as its use for achieving cleanliness.⁸ In some areas the *temazcal* has been abandoned without any other bath to replace it.⁹

In a recent study of the Tarascan Indian village of Cherán in the state of Michoacán, Beals says: "Adults bathe fairly regularly on their own initiative. Young men and women usually bathe at least once a week; older men may not bathe more than once a month."¹⁰

Lack of cleanliness seems to be apparent in the rather widespread existence of body lice in the rural districts. In Cherán it was concluded that "head lice afflict many if not all Cherán residents, especially children. Delousing is a common occupation when women are visiting or resting with the children about. Men also delouse the children, but a man was never seen being deloused. Sunny days when people sit about the house yards are a favorite time, but delousing was never seen on the streets."¹¹ In a recent study of diets in two villages in the Valle del Mezquital made by R. K. Anderson and others under the auspices of the Rockefeller Foundation, physical examinations were given to 966 individuals, and 90-95 per cent were found to be infested with lice.¹² The Mexican government in co-operation with the Rockefeller Foundation recently initiated a delousing project in the hope of developing a technique that would be effective and could be widely used.

LAUNDRY EQUIPMENT

Items of household equipment such as washing machines or even washtubs are practically unknown in rural Mexico. Usually women do the family laundry in the near-by stream or pool, if such is available. They use plenty of soap, rub the clothes on stones for washboards, and spread the clothes on the grass to dry. Washing under these conditions becomes somewhat of a social occasion, with neighbors visiting and chatting while carrying on their work. Often what

8. Redfield claims that in Tepoztlán the *temazcal* is slowly becoming secularized, with a growing tendency to use it for cleansing purposes only (*op. cit.*, p. 169).

9. Ernest Gruening, *Mexico and Its Heritage* (New York, 1928), p. 73.

10. Ralph L. Beals, *Cherán: A Sierra Tarascan Village* (Washington, D.C.: Smithsonian Institution, 1946), p. 200.

11. *Ibid.*, p. 200.

12. R. K. Anderson, M.D., *et al.*, "A Study of the Nutritional Status and Food Habits of Otomi Indians in the Mezquital Valley of Mexico," *American Journal of Public Health and the Nation's Health*, XXXVI, No. 8 (August, 1946), 884.

bathing is done by the womenfolk is undertaken in connection with the laundry. This applies especially to the washing of the hair.

SEWAGE DISPOSAL

Systems of sewage disposal have never been devised for the masses of the Mexican population. They are found only in the larger cities, and even there they are by no means accessible to all the inhabitants. In the smaller cities, towns, and villages sewage systems are practically unknown, and even latrines are unusual. In the entire Republic, 86.5 per cent of the total population live in homes having no facilities for sewerage disposal (Table 56). The proportion is greater than 90

TABLE 56
PERCENTAGE OF TOTAL POPULATION OF MEXICO LIVING IN HOMES
HAVING NO FACILITIES FOR SEWAGE DISPOSAL, BY REGIONS*

Region	In Homes without Sewage Disposal	In Homes with Sewage Disposal	In Homes with neither Drinking Water nor Sewage Disposal
North Pacific	93.2	6.8	56.1
North	90.1	9.9	55.6
Central	79.7	20.3	52.5
Gulf	91.6	8.4	50.7
South Pacific	97.3	2.7	73.2
Total	86.5	13.5	56.0

* Data from *Segundo censo de edificios* (1930) (Dirección General de Estadística).

per cent for every region with the exception of the central, which contains three of the four large cities in the Republic having over 100,000 inhabitants.

The above conditions exert a most unfavorable influence on the health of the masses of the population. This is especially true in a land where screens and refrigeration are entirely unknown, save to the small minority constituting the upper and middle classes, and where in many regions water is so scarce that personal cleanliness in the form of washing of hands before eating, much less of bathing, has never become an established practice among the masses of the population. The problem of sanitation is accentuated by the custom of adjoining the houses one to another, even in comparatively small villages. The effects of these conditions are undoubtedly reflected in the mortality rates presented in the chapter on *health and mortality*.

SEWING MACHINES

The most widely distributed article of equipment that can, by any stretch of the imagination, be called a modern convenience in the homes of rural Mexico is unquestionably the Singer sewing machine. This is found in many parts of the Republic, even in some of the more isolated regions. It is not unusual to find it in the most rude hut where no other sign of modern civilization is visible. For the country as a whole, there are 22.4 sewing machines for every 100 families; stated in another way, one is found in the home of about 1 family in every 5 (Table 57). They are more frequent in the northern regions than in

TABLE 57
NUMBER OF SEWING MACHINES PER 100 FAMILIES, BY REGIONS
AND BY TYPE OF DWELLING*

Region	ALL DWELLINGS	TYPE OF DWELLING		
		Huts	Single-Family Dwellings	Apartment Houses
North Pacific	30.8	17.8	39.9	32.2
North. .	32.2	16.2	39.0	29.0
Central	21.8	8.2	27.7	31.4
Gulf . .	20.4	10.5	32.5	31.4
South Pacific	9.0	4.3	20.8	24.4
Total	22.4	9.3	31.4	31.2

* Data from *Segundo censo de edificios* (1939) (Dirección General de Estadística).

the southern, ranging from about 1 for every 3 families in the north to about 1 for every 11 families in the south Pacific region. The comparative distribution by states is shown in Figure 26. One might say that its use tends to disappear as the distance from the United States increases.

The number of sewing machines per 100 families living in huts for the country as a whole is 9.3, or about 1 for every 10 families. This varies among the different regions from 17.8 per 100 families in the north Pacific to only 4.3 in the south Pacific. As might be anticipated, the number of sewing machines possessed by families living in huts is proportionately much smaller than the number in either single-family houses or apartments.

Sewing machines are more than twice as widely distributed in urban areas as in rural (Table 58). The number per 100 families is 35.1 for the former, as compared with 15.6 for the latter. When, how-

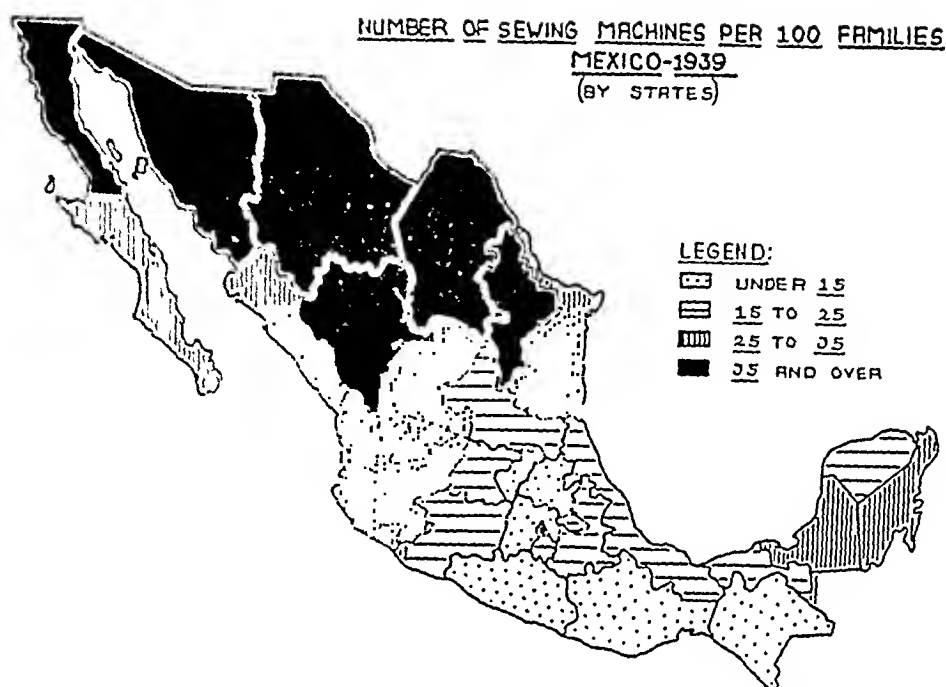


FIG. 26.—The number of sewing machines per 100 families in Mexico, by states. Data from *Segundo censo de edificios* (1939).

TABLE 58
NUMBER OF SEWING MACHINES PER 100 FAMILIES, ACCORDING TO
RURAL-URBAN RESIDENCE*

RURAL-URBAN RESIDENCE	No. OF FAMILIES	SEWING MACHINES		No. OF SEWING MACHINES PER 100 FAMILIES
		No.	Per Cent	
Urban†	1,521,105	534,386	55.0	35.1
Localities of over 50,000 inhabitants	656,954	225,897	23.2	34.4
Other urban localities	864,151	308,489	31.7	35.7
Rural‡	2,805,076	437,784	45.0	15.6
Clustered§	2,656,683	412,454	42.4	15.5
Dispersed||	148,393	25,330	2.6	17.1
Total	4,326,181	972,170	100.0	22.5

* Data from *Segundo censo de edificios* (1939) (Dirección General de Estadística).

† Includes population living in localities of over 2,500 inhabitants.

‡ Includes population living in localities of 2,500 or less inhabitants.

§ Rural communities of 10 or more houses in a cluster.

|| Rural areas of less than 10 houses in a cluster.

ever, the rural population is divided into the clustered settlements (ten or more houses in a locality) and the dispersed type of settlement (less than ten houses in a locality), the latter shows a higher ratio of sewing machines than does the former.

RADIOS

In contrast with sewing machines, radios do not have a wide distribution and are found mostly in the larger cities and in the tier of northern states bordering the United States. In Mexico there were 16.5 radios per 1,000 inhabitants in 1940, as compared with 387.3 in the United States. Although urban centers contain only 35.1 per cent

TABLE 59
TOTAL NUMBER OF RADIOS PER 100 FAMILIES
BY RURAL-URBAN RESIDENCE*

RURAL-URBAN RESIDENCE	NO. OF FAMILIES	RADIOS		NO. OF RADIOS PER 100 FAMILIES
		No.	Per Cent	
Urban†.....	1,521,105	296,401	91.3	19.5
Localities of over 50,000 inhabitants.....	656,954	190,691	58.7	29.0
Other urban localities..	864,151	105,710	32.6	12.2
Rural‡.....	2,805,076	28,339	8.7	1.0
Clustered§.	2,656,683	27,022	8.3	1.0
Dispersed||	148,393	1,317	0.4	0.9
Total	4,326,181	324,740	100.0	7.5

* Data from *Segundo censo de edificios* (1939) (Dirección General de Estadística).

† Includes population living in localities of over 2,500 inhabitants.

‡ Includes population living in localities of 2,500 or less inhabitants.

§ Rural communities of 10 or more houses in a cluster.

|| Rural areas of less than 10 houses in a cluster.

of the total population, 91.3 per cent of the radios are found there (Table 59). In urban areas there are 19.5 radios per 100 families, while in the rural areas there is only 1.0. In other words, about 1 home in 5 in the cities has a radio, while only 1 in 100 has a radio in the rural districts. Furthermore, radios in the urban districts are confined in great extent to the larger centers; 58.7 per cent of all radios (64.3 per cent of the urban radios) are found in eleven centers containing more than 50,000 inhabitants.

When the number of radios is related to type of dwelling, the logical expectation results: they are numerous in the apartment houses,

rather scarce in the single-family dwellings, and rare in the huts. For every 100 families in apartment houses there are 26.1 radios, while in single-family houses there are only 9.5, and in huts only 0.5 (Table 60). In only one state or territory are radios commonly found in huts. This is the territory of Baja California Norte where, even in the huts, there are 11.6 radios for every 100 families. It is not unusual in

TABLE 60
NUMBER OF RADIOS PER 100 FAMILIES, BY REGIONS
AND BY TYPE OF DWELLING*

REGION	ALL DWELLINGS	TYPE OF DWELLING		
		Huts	Single- Family Dwellings	Apartment Houses
North Pacific	5.9	1.1	9.1	14.7
North	8.4	1.1	10.9	15.9
Central	9.7	0.4	9.9	28.9
Gulf	4.4	0.5	8.5	15.7
South Pacific	1.2	0.2	3.5	8.6
Total	7.4†	0.5	9.5	26.1

* Data from *Segundo censo de edificios* (1939) (Dirección General de Estadística).

† This table includes only radios in dwellings, while Table 59 includes all radios.

the Mexicali Valley to see radio antennae protruding from makeshift huts.

TELEPHONES

Telephones likewise are not widely distributed. For the Republic as a whole there is, on the average, 1 telephone apparatus for every 110 inhabitants (Appen. A, Table 34) as compared with 1 for every 6.3 persons in the United States. This includes business and governmental telephones as well as all others. They are concentrated mostly in the cities. In the Distrito Federal alone, 55.1 per cent of the telephones in the entire Republic are to be found. In the south Pacific region there are 2,619 persons per telephone, and in the state of Guerrero there is only 1 telephone for every 9,772 inhabitants.

ATTITUDES CONCERNING HOUSING

Data have been presented in this chapter which seem to indicate that, judged by modern standards of health and convenience and despite the existence of numerous exceptions, the homes of rural

Mexico generally are inadequate. Although lack of economic resources is one important factor in accounting for the poor housing conditions, it is by no means the only one, and in many instances is not even the most important one. Present housing practices in rural areas are largely the same ones that prevailed during colonial times, and some of the equipment and techniques are definitely pre-Columbian in character. The inhabitants have long been accustomed to these conditions, and they are not particularly worried over them. There is no evidence that they would readily improve their housing conditions even if funds were suddenly to become available—quite the contrary. There is ample evidence to indicate that an increase in the family income does not automatically result in any improvement in housing conditions. We have already noted that in the Laguna region many of the ejidatarios were living in the same houses that they had occupied as peons, despite the fact that some of them were receiving greatly augmented incomes (chap. x). Similar observations were made by the author in almost every one of the commercialized farming areas, where the collective ejido tends to prevail. The sugar-producing region of Los Mochis, Sinaloa, for example, is regarded by the Ejido Bank as one of its more successful co-operative experiments. The incomes of the ejidatarios appear to have increased considerably over what they received as peons; yet they are living in exactly the same shacks which they inhabited at that time. The only change in this respect has probably been for the worse, since the jacales are now older and the grounds around them are not cared for at all. The hacendado used to employ a permanent caretaker at each work camp to take care of the grounds. Now there is no such person, and the ejidatarios show no interest in such matters themselves. Similar observations were made by the author at Lombardía and Nueva Italia and at other areas. In a few instances, under the leadership of the Ejido Bank or some other organization, new houses have been constructed, but the vast majority of the ejidatarios are living in about the same types of jacales they lived in as peons. In many instances they occupy exactly the same huts with no improvements added (see Pl. XIII, *b*).

Modern standards of housing are simply not recognized by the vast majority of the rural inhabitants as being important. Such standards rank low on the scale of cultural values. As was concluded in a recent study of housing among the Tarascan Indians, "for the majority of the population, improvement of housing conditions is not an econom-

ic problem. Rather it is a problem of altering basic patterns of culture."¹³ Increase in income is likely to be spent in purchasing more modern clothes or increased amounts of intoxicating beverages, perhaps in the purchase of a wider variety of food, or in the financing of more elaborate fiestas; but, as yet, there is little evidence that increasing incomes will automatically result in the improvement of housing. Such improvement will, of necessity, have to be preceded by a program of education that will demonstrate to the local inhabitants the advantages that might accrue to them from more adequate housing; otherwise there is likely to be little noticeable change in the near future.

13. Ralph L. Beals, Pedro Carrasco, and Thomas McCorkle, *Houses and House Use of the Sierra Tarascans* (Washington, D.C.: Smithsonian Institution, 1944), p. 37.

Diet and Clothing

DIET

THE diets of rural Mexico have never been adequately studied. Information concerning them is incomplete, and such as is available is subject to subsequent verification. Data presented here are drawn from a number of sources, including (1) the author's own observations from travels in various parts of the country, (2) observations of previous travelers and scholars, (3) Mexican census data for 1940, and (4) the results of a few scientific studies of small areas made by recent investigators.

Such data as are available tend to indicate that corn is the basic element of food in the rural areas. Corn is usually eaten in the form of the tortilla, although sometimes it is supplemented by gruels and other corn preparations. The preparation of tortillas has been described as follows:

One part of corn is placed in two parts of approximately 1 percent lime solution, heated to about 80°C for 20 to 45 minutes, then allowed to stand until the following day. Boiling is avoided, for this would produce a *masa* [tortilla dough] which adheres to the hands and to the *comal* [griddle] during cooking. On the next day the mother liquor is decanted from the corn (*nixtamal*), which is then washed two or three times with water. The *nixtamal* is ground by hand on a stone *metate* into a fine *masa*. In the larger towns the *nixtamal* is often taken to a power-driven mill for grinding, while in the cities the finished *masa* is purchased in the market.

About 50 grams of the *masa* are used to form round cakes, 15 to 20 cm in diameter and approximately 0.2 cm thick. These cakes are cooked on a *comal* (hot iron plate) for about 30 seconds, turned and cooked for 75 to 100 seconds. When it swells and becomes orange in color, the cake is turned again and cooked for another 30 seconds, when the *tortilla* curls to resemble a biconvex lens.

While people in the United States enjoy *tortillas* cooked to a hard brown cake, the Mexican removes the *tortilla* from the hot plate before it has browned and while it is still pliable. He often curls the *tortilla* and uses it as a spoon, biting off a portion with each mouthful.¹

1. René O. Cravioto *et al.*, "Nutritive Value of the Mexican Tortilla," *Science*, July 27, 1945, pp. 91-93.

The number of tortillas consumed in the course of the day by an adult is often large. The per capita consumption of corn in Mexico is about 280 grams daily, although many persons in the lower-income groups consume as much as 700 grams a day.² Several women with large families have reported to the author that they usually spend the time from five to eleven o'clock in the morning at the metate and the griddle, with few interruptions (see Pl. XV). Ordinarily, enough tortillas are made at one time to last the entire day—they are merely "warmed up" for two of the three meals. The apparently large consumption of tortillas in some areas is due to the fact that the tortilla constitutes a very large proportion of the total amount of food eaten. Steggerda reports, as a result of three years of studying food among the Mayas, that 75 per cent of their total daily energy intake consists of corn.³ All the Indian groups of Mexico studied by Basauri are reported to use corn as the fundamental element in their diet.⁴

A study of the nutritive value of the tortilla was made recently in an effort to determine the effect of the tortilla-making process on the food value of the corn. Samples of both white and yellow corn gathered from various parts of Mexico were used. The authors concluded:

The carotene content of the white corn was too low for measurement. There was a 40 per cent. loss in the carotene of the yellow corn during the preparation of the *nixtamal* and the *tortillas*. The losses in thiamine and niacin were relatively small. No measurable loss in riboflavin was noted. The calcium content increased 2010 per cent., the phosphorous content 15 per cent., and the iron content 37 per cent. The high calcium content of the tortilla resulted from treatment of the corn with lime water. The Mexican has achieved an adequate calcium intake by this food practise, for an average daily consumption of 280 grams of *tortilla* furnishes more than 500 mgs of calcium.⁵

In some cases tortillas are supplemented by wheat bread. This occurs much more frequently in the towns and cities than in the rural districts. The number of inhabitants of Mexico who eat any wheat bread is indicated in Table 61, according to the size of the community in which they live. Of the total inhabitants, 45.1 per cent eat wheat bread at least occasionally, while 54.9 per cent eat no wheat bread. In cities of over 10,000 inhabitants, 85.8 per cent eat wheat

2. *Ibid.*

3. Morris Steggerda, *Maya Indians of Yucatán* (Washington, D.C.: Carnegie Institution of Washington, 1941), p. 160.

4. Carlos Basauri, *La Población indígena de México* (3 vols.; Mexico City, 1940).

5. Cravioto *et al.*, *op. cit.*, pp. 91–93.

bread, while 14.2 per cent do not. Among the middle and upper classes wheat bread is almost always used for breakfast, and there is usually a choice between wheat bread and tortillas at one or both of the other meals. In many cases tortillas are consumed only at the noon meal. Bakeries are rather plentiful in the larger cities, as families seldom bake their own bread. In localities having a population of less than 10,000 inhabitants, only one-third ever eat wheat bread. Unfortunately, data are not available for communities of varying size under 10,000 inhabitants. If such data were available for the

TABLE 61

POPULATION OF MEXICO CLASSIFIED ACCORDING TO WHETHER OR NOT
THEY EAT WHEAT BREAD, BY SIZE OF COMMUNITY*

	TOTAL POPULATION		SIZE OF COMMUNITY			
			Localities of over 10,000 Inhabitants		Localities of 10,000 or Less Inhabitants	
	No. of Persons	Per Cent	No. of Persons	Per Cent	No. of Persons	Per Cent
Eat wheat bread.....	8,857,970	45.1	3,697,553	85.8	5,160,417	33.6
Do not eat wheat bread.	10,795,582	54.9	610,687	14.2	10,184,895	66.4
Total.....	19,653,552	100.0	4,308,240	100.0	15,345,312	100.0

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

smaller communities separately, we should probably find that in many of them 100 per cent of the population never eat wheat bread.

The widespread use of corn in the diet, together with the preponderant role that it plays in comparison to other foods, is probably one of the more important reasons why such a large part of Mexican agriculture is devoted to the growing of corn. Since much of the agriculture is of a subsistence nature, the peasants fear that if they do not grow what corn they need for their food they may go hungry. This leads to the practice of planting corn on land that probably would be much more suitable for other crops. It has resulted in many districts in an utter dependence on corn, or in what Gamio chooses to call "slavery to corn."⁶ The average Indian peasant tends to regard the growing of corn as almost synonymous with living, since it is believed that if the former function should cease there would be little

6. Manuel Gamio, *Hacia un México nuevo* (Mexico City, 1935), p. 89.

on which the body could subsist. With this firmly rooted attitude taken into consideration, one may understand how it is that two-thirds of all the crop land in Mexico is devoted to the growing of corn.

In addition to tortillas, there are a few other dishes prepared from corn. These are used more as occasional dishes, and their distribution is by no means universal. A gruel called *atole* is used in many areas and is prepared by stirring the tortilla dough in water, straining it, cooking it slightly, then adding flavoring of one kind or another. In some areas a preparation known as *pozole* is common. This is made by mixing the tortilla dough with water. *Pozole* is used most often as a lunch by persons working in the field or while traveling. When the author made a few short trips on horseback into the hill country in the vicinity of Berriozabal, in the state of Chiapas, he was accompanied by three ejidatarios, and the only food they took along for lunches was *pozole*. At noon they would stop by a stream or a pool of water, dip up a half cup of water, finish filling the cup with the tortilla dough which they had brought along in small pouches, stir the contents, and drink it as *pozole*. Two other preparations made from corn are widely used on occasions of fiesta or for selling commercially and are occasionally used in the home. These are tamales and *tacos*. The tamale is made by adding shortening, varying quantities of ground meat, and seasoning to the tortilla dough. It is then wrapped in corn husks and boiled. The *taco* is a tortilla wrapped around such ingredients as meat, beans, chile, or some other food. A preparation known as *pinole* is used extensively among the Tarahumaras of southwestern Chihuahua and northwestern Durango. This is made by toasting the corn and grinding it into a meal. It is then consumed either dry or as a gruel.⁷

The next most widely used and frequently consumed foods are beans (frijoles) and chile. Beans are always boiled. After becoming soft, they are frequently placed in a pan over the fire and mashed into a purée. A small amount of fat may be added if available. Chile is made into a variety of sauces and served with the tortillas or poured over meat. *Mole* is a dark-brown sauce made from chile and is used with either boiled chicken or turkey—a favorite dish with most Mexicans.

Observers have frequently asserted that the diet of the rural Mexi-

7. Roberto de la Cerda Silva, "Los Tarahumaras," *Revista mexicana de sociología*, V, No. 3 (1943), 413.

can peasant consists very largely of these three foods—corn, beans, and chile, with corn greatly predominating. According to Gamio:

One of the most serious obstacles to the normal development of the rural masses, and consequently, to good health, is the lack of variety and food value of the daily diet, which consists mainly of corn, chile and beans; occasionally other foods are added, but their consumption cannot be taken into consideration since they are exceptions. This unilateral diet lacks the amounts and varieties of proteins, vitamins, fats and mineral salts which are necessary for normal body development. . . .⁸

Simpson comes to about the same conclusion as Gamio, although he points out a few regions in which other foods are consumed, largely because of their greater availability. His observations are as follows:

In addition to *tortillas* the Mexican peasant eats *frijoles* and *chile*. Fresh vegetables, fruits, rice, wheat bread, potatoes and other tubers, coffee and tea are in most parts of the country occasional rather than daily articles of consumption. Red meat (except in the northern states), fish (except along the coasts), poultry, eggs, milk and sweets of all kinds (including the native chocolate in solid form or as a drink) are luxuries reserved for special occasions. The consumption of fats whether animal or vegetable (peanuts, sesame, rape, and so forth) is low. There is no lack of variety of foods in Mexico, but as is the case with many other things, the enjoyment of a varied diet is restricted to a relatively small minority living in the cities. Country folk may on occasion eat fruits, vegetables, meats, and sweets but these things for most of the people most of the time are of necessity regarded as frills and decorative extras . . . the staples of diet day in and day out, breakfast, lunch and supper, are: *tortillas*, *frijoles* and *chile*.⁹

Other observers have noted also that meat and milk are rather scarce items in the diet of the average Mexican peasant. In some instances the absence of milk has been noted even when cows were kept. In such cases the cows were used as work animals or were sold as beef. Mrs. Parsons tells of prescribing milk for a sick child in Mitla, Oaxaca, and of being told by its father that milk was too "strong" for the child and that *atole* would be much better.¹⁰ Undoubtedly there are regional variations in food habits, and these have not been adequately studied. It is probable that beef, milk, and wheat bread are much more widely consumed in the northern states than elsewhere. The consumption of wheat bread among the total population is much

8. Manuel Gamio, *Algunas consideraciones sobre la salubridad y la demografía en México* (Mexico City, 1939), p. 21.

9. Eyler N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, N.C., 1937), pp. 263, 264. Reprinted from *The Ejido: Mexico's Way Out* by Eyler N. Simpson by permission of the University of North Carolina Press. Copyright, 1937, by the University of North Carolina Press.

10. Elsie Clews Parsons, *Mitla—Town of the Souls* (Chicago, 1936), pp. 34, 35.

more prevalent in the northern states and less in the south Pacific states (Appen. A, Table 35). When only those communities having less than 10,000 inhabitants are considered, however, it is evident that a smaller percentage of the people eat wheat bread in the central area than in any other region. The consumption of fish naturally is greater along the seacoasts, in the vicinity of the larger lakes, such as Lake Chapala and Lake Pátzcuaro, and along some of the larger rivers. Certain fruits, such as bananas and citrus fruits, are consumed in the more tropical areas. Families in many areas regularly keep a few chickens and a pig or two. The consumption of poultry products and pork needs to be thoroughly studied. In arid regions the various cactus plants are used for food, and this would need to be taken into consideration in any attempt to evaluate the nutritive content of the diet. Use is also made of wild herbs and plants of various types, a fact which escapes the notice of the outside observer because these foods are often eaten on the trail between meals. In certain of the more tropical areas, nuts and seeds of different kinds form an important part of the diet. Concerning the diet of the Mayas of Yucatán, Steggerda makes the following observations:

Maize is eaten chiefly in the form of tortillas, although it is also often made into atole or pozole, two gruel drinks. . . . Beans are second in importance. Squash and tubers are prepared in many ways, and the leaves of some plants are boiled and eaten somewhat like spinach. Rice, chile, small native tomatoes, the green leaves of onions, squash seeds, and numerous native vegetables are included in their diet. . . .

The Maya use comparatively little fruit, although it is generally available throughout the year. Most families have fruit trees in their yards, but the fruit is not abundant. Sweet and sour oranges, small native plums, custard apples, wild pineapples, seeds of the palm tree, prickly pears, sour sop, and a small variety of banana are eaten occasionally.

The Maya eat meat when it is available, but they cannot be regarded as meat eaters. Beef, pork, chicken, duck, wild pig, deer, rabbit, squirrel, and a rodent called *tepezcuinte* are the most common. The daily protein intake per individual averages 74 gm., a rather low figure. Analyses of 24 hour collections of urine of four male Maya for nitrogen content indicated that the nitrogen excretion per kilogram of body weight was not significantly different from the average found in a similar study on male medical students in the United States. The total daily energy intake averaged 2565 calories, which is low when compared with the daily energy intake (3500 calories) of the average American laborer.¹¹

A study of diets in the Tarascan village of Cherán in the state of Michoacán was recently made by Ralph L. Beals and Evelyn Hatcher. This village is reported by the Mexican census of 1940 as having a to-

11. *Op. cit.*, pp. 160, 161.

tal population of 3,380 individuals and is said by the authors to be relatively prosperous in relation to neighboring villages. They express the opinion that the diet in this village is probably better than in the majority of Tarascan towns. In their study three methods of collecting data were used: (1) a complete list of foods consumed by a number of families was compiled; (2) a collection was made of menus of actual meals for as many families as possible; and (3) a number of literate families co-operated in keeping a complete list of all items of food consumed during a period of two weeks. The authors point out the many difficulties encountered and warn their readers that their conclusions are to be regarded as only tentative. From all the sources of information available, they compiled a table showing the content of the "average" diet for an adult person for one week. They conclude that "... the diet contains somewhat more than minimum requirements of vitamins A and B₁, slightly less than minimum requirements of vitamin C, and appreciable deficiency of vitamin B₂, ample proteins, and nearly a 25 percent deficiency in calories."¹²

They present data showing the weekly diet for one of the more "wealthy" and for one of the poorer families of the village. The data for the wealthy family are summarized as follows:

While the vitamin A intake is above the minimum requirements (although still far below optimum recommendations), virtually all the vitamin A comes from yellow maize. If white maize were to be consumed, the vitamin A intake would be dangerously reduced. When it is remembered that in some sections of Michoacán, white maize is preferred, it is evident that if the diets are at all similar to those at Cherán, serious vitamin A deficiency must occur. This is almost certainly the case, as diets of most Tarascan and many rural Mexicans in the area are little different from those in Cherán. The wealthy diet shows an approach to the higher recommended quantities of vitamin B₁, but vitamin C does not quite reach the minimum, and vitamin B₂ is still only about half the minimum needed. The protein intake is quite high and the calory intake is slightly above the recommended minimum for moderately active males.¹³

Concerning the diet of the poor family, they say:

... The vitamin A intake is slightly above minimum requirements, although again the figures depend upon the use of yellow maize. Vitamin B₁ intake is well below requirements, and is only about half of the recommended quantity. Vitamin C, on the other hand, shows up much better than in the wealthy diet, due to the greater use of chile. If this is typical of poor family diets, then the vitamin C intake of poorer people is almost twice the minimum requirements, although

12. Ralph L. Beals and Evelyn Hatcher, "The Diet of a Tarascan Village," *América indígena*, October, 1943, pp. 298-301.

13. *Ibid.*

still short of what is recommended by some authorities. With vitamin B₂, however, the deficiency again becomes marked. Protein intake is barely above the minimum, while less than two-thirds the minimum number of calories is secured.¹⁴

The authors did not make any clinical tests to determine whether or not deficiencies in diet were resulting in biological deficiencies, but they suggest the need for such tests in order to validate their study:

One additional method of checking the validity of the present results is possible. The vitamin picture does suggest certain clinical and subclinical deficiencies. Persons using white corn in this area should show a high incidence of night blindness, some xerophthalmia among children, and retarded growth. The B-vitamin picture is everywhere low, markedly so among low income groups. Consequently, there is expectation of pellagra, lack of vitality, and digestive disorders such as constipation. Scurvy probably should occur at times if the results are more or less correct. All of these dire predictions could be checked by good medical field studies; if verified, the reliability of the present study would be considerably enhanced. The probability that vitamin B deficiencies affect vitality indicate the importance of further studies to determine possible influences on culture development or cultural participation.¹⁵

Finally, the authors suggest that considerable improvement in the diet of the families studied could be made merely by shifting the emphasis on items already present, and they express the opinion that this improvement could be made at little or no additional cost.

Any careful analysis of the content of the diet in the Central Mesa must devote considerable attention to the beverage known as "pulque," sometimes referred to as the national beverage of the poorer classes in Mexico and dating in origin from pre-Cortés times. Pulque is an alcoholic beverage made from the juice of the maguey plant, which is grown extensively throughout certain parts of the Central Mesa. R. K. Anderson and his associates recently described the making of pulque as follows:

Pulque is produced by fermentation of the juice of the maguey. Eight to ten years after transplanting, just before the plant is ready to put out the central flower-bearing stalk, this central part is removed, leaving a cup-shaped receptacle. Into this cup juice from the leaves drains and is removed daily with a large pipette made from an elongated gourd. The sides of the cup must be scraped daily in order to keep the flow going. The leaves have stored up a great deal of sugar (chiefly sucrose) for the needs of the rapidly growing flowering stalk, and the juice produced is therefore quite sweet and is known as *agua miel* (honey water). This *agua miel* is inoculated with a culture from a previous batch of pulque and allowed to ferment for a variable time, usually about 11 to 12 days.

14. *Ibid.*

15. *Ibid.*

After it reaches the optimum point it should be drunk within 24 to 48 hours, since the fermenting organisms are not removed and the fermentation proceeds unchecked, causing it to spoil. The presence of the fermenting organisms gives pulque a whitish, turbid appearance. It is mildly acid and not particularly unpleasant to the taste. It is usually produced under very unhygienic conditions, but its acidity probably prevents it from being a good culture for pathogenic organisms.

Because the organisms which cause the fermentation are not removed they contribute some vitamin B and protein to the drink, and the vitamin C content is considerable.¹⁶

The lack of sanitary methods and facilities for making and handling pulque probably result in the transmitting of certain diseases, although this point has not been thoroughly studied. The alcoholic content of pulque is generally 3-5 per cent. In some areas a tremendous amount of pulque is drunk by the average individual. In the Valle del Mezquital, Anderson and his associates observed:

Pulque is drunk almost universally, often in extremely large quantities. With many persons it entirely takes the place of water. Popularly it is believed to be very nutritious, many of the men saying they are unable to work without it and that it serves as a substitute for meat in the diet. The consumption even by babies and small children was considerable. . . .

. . . . The average consumption for adults in our dietary records was 1 to 2 liters a day and this is probably low, since it is difficult to get an accurate report on a substance drunk abundantly at odd times. It was not unusual for a man to drink as much as 10 liters in a day.¹⁷

Bustamante gives the annual national consumption of the principal alcoholic beverages in Mexico as follows:

pulque—41 liters per capita
beer—15 liters per capita
whiskey—6.4 liters per capita
tequila—2.5 liters per capita
mezcal—1.6 liters per capita¹⁸

Regardless of the impurities in pulque, recent investigations tend to show that it contains significant amounts of minerals and vitamin C and considerable amounts of vitamin B. These vitamins seem to pre-

16. R. K. Anderson, M.D., *et al.*, "A Study of the Nutritional Status and Food Habits of Otomi Indians in the Mezquital Valley of Mexico," *American Journal of Public Health and the Nation's Health*, XXXVI (1946), 887.

17. *Ibid.*, pp. 887, 888.

18. Miguel E. Bustamante, M.D., "Public Health and Medical Care," *Annals of the American Academy of Political and Social Science*, March, 1940, p. 161.

vent serious dietary deficiencies that otherwise might result from diets in certain areas of the Central Mesa.

The National Institute of Nutrition in Mexico, in co-operation with other agencies, has recently carried on a series of studies which seem to indicate that the average Mexican is probably better nourished than is generally supposed. An analysis was made recently of the composition of 112 samples of food from Mexico. These foods were analyzed for carotene, thiamine, riboflavin, niacin, ascorbic acid, calcium, phosphorus, iron, nitrogen, ash, and total solids content. Some of the comments of the authors of this study are quite revealing:

Some exceptional foods have been revealed by these analyses. Malva is an uncultivated plant that grows abundantly on the Mexican plateau. It is cooked in much the same manner as spinach which it resembles in taste, though malva is more fibrous. It is interesting that an ordinary portion (100 gm.) of malva contains approximately 40% of the calcium, 90% of the iron, 14% of the vitamin A (as carotene) and 60% of the ascorbic acid allowances for an adult man proposed by the National Research Council. The variations of the analyses of the several samples of malva indicate that more nutritive strains can be expected through breeding and cultivation.

Charal is an inexpensive air-dried fresh water fish, usually 3 cm. to 6 cm. in length, the entire carcass of which is customarily eaten. Charales are especially rich in protein and calcium for a 30-gm. portion supplies approximately 27% of the protein and 155% of the calcium allowances of adult man.

Queso de tuna is prepared from the fruit of the prickly pear cactus and resembles cheese in texture. Its nutritive value lies especially in its iron and ascorbic acid content. Cusanos are grubs gathered from the roots of the maguey cactus and served as a fried delicacy. They are low in nutritive value.

Pulque is a beverage prepared by the fermentation of the juice of the maguey cactus. In arid areas of the Mexican plateau, it is consumed in liberal amounts, partly to supply water. It is an inexpensive sour drink which in daily portions of 500 ml. furnishes significant quantities of minerals and vitamins, especially ascorbic acid. The ascorbic acid analysis has been confirmed by bioassay using guinea pigs.

The results indicate that sesame seed is a food rich in calcium, iron, thiamine, and niacin; guaje seed is rich in calcium, iron, carotene and thiamine; charales in protein, calcium, iron, vitamin A and niacin; parota in protein, thiamine and niacin; peanuts in protein and niacin; and calabaza seed in protein, iron and niacin. In the quantities consumed, pulque is a good source of thiamine and ascorbic acid. Piñón contains an abundance of protein and niacin, and many of the beans are rich in protein, iron, calcium and niacin.

The exceptional amounts of calcium, iron, carotene, thiamine and protein found in these Mexican foods suggest that it may be possible to nourish the Mexican people without the use of dairy and meat products. These results indicate that the food pattern of Mexico is quite different from that of the United States. Thus it would be inadvisable to base the Mexican nutrition program upon that of the United States. Instead, this program should be developed upon the

nutrient composition of Mexican foods. Finally, the data of this analysis of more than 100 foods indicate that the Mexican dietary may be more adequate in ascorbic acid, phosphorous, calcium and thiamine than in riboflavin, niacin and quality-protein.¹⁹

R. K. Anderson, of the International Health Division of the Rockefeller Foundation in Mexico City, and others recently made a study of the diets of the Otomí Indians living in two villages of the Valle del Mezquital. This is a very dry and barren region and is one of the most depressed areas, culturally and economically, in all Mexico. Yet, despite signs of abject poverty, Anderson found little evidence of malnutrition:

The inhabitants eat very few of the foods which are commonly considered as essential to a good nutrition pattern. Their consumption of meat, dairy products, fruits, and vegetables is exceedingly low. However, through the eating of tortillas, the drinking of pulque (the fermented unfiltered juice of the century plant), and the eating of every conceivably edible plant available, a fairly good diet is maintained.

Pronounced clinical nutritional deficiency was uncommon. The only deficiency, evident both clinically and through dietary records may be attributed to insufficient riboflavin. Because of the large corn consumption some niacin deficiency probably also existed. Protein, if considered qualitatively, and caloric intakes were moderately low. Intakes of vitamin A, thiamin, ascorbic acid, iron, calcium, and phosphorus were on the average good.

Clinically, angular cheilosis and glossitis were the major signs of deficiency encountered. Growth by United States standards was retarded, but it is impossible to evaluate the nutritional as distinct from the racial factors. The teeth were found to be excellent.

Blood studies, including hematological examination and determination of blood proteins and vitamins A and C, revealed values which in general compared favorably with those encountered elsewhere.

It appears that in spite of the barrenness and poverty of the region its inhabitants have through many centuries developed food habits and a way of life adapted thereto. Attempts at change would be a mistake until their economic and social conditions can be improved and something really better substituted.²⁰

The percentage of each of the chief nutrients found in the diet of the Otomí Indians derived from each of the foods indicated is given in Table 62. It will be noted that tortillas and pulque play very important roles in the diets of these people. The average intake per person in comparison with the recommendations of the National Research Council are given in Table 63.

From these recent studies it would appear that there is need for

19. René Cravioto B., *et al.*, "Composition of Typical Mexican Foods," *Journal of Nutrition*, XXIX, No. 5 (May, 1945), 327, 328.

20. Anderson *et al.*, *op. cit.*, p. 902.

TABLE 62

PRINCIPAL SOURCES OF CHIEF NUTRIENTS IN THE DIETS OF OTOMI INDIANS IN THE MEZQUITAL VALLEY OF MEXICO*
(From 100 Seven-Day Diet Records Selected According to Age and Sex Distribution of Group Studied)

Calcium	Total Protein	Animal Protein (Av. 4.8 Per Cent of Total Protein)	Carbohydrate	Fat	Vitamin A
Tortillas Pulque Beans Greens, vegetables, and fruits	Per Cent 77 12 8 2 1	Per Cent 28 15 13 12 11 3	Tortillas Beans Chile Greens, vegetables, and fruits	Per Cent 70 6 6 2 1	Per Cent 62 53 5 2
		Goat and sheep Pork (dried) Beef Blood (goat and sheep) Chicken and rabbit Eggs and milk		Tortillas Meat Lard Greens, vegetables, and fruits Beans	Greens Chile Tortillas Fruits and vegetables
Thiamin	Riboflavin	Niacin	Vitamin C	Calcium	Iron
Tortillas Pulque Beans Fruits, greens, and vege- tables Meat	Per Cent 74 10 7 1 2	Per Cent 55 23 5 1 2	Pulque Greens Fruits and vegetables Chile	Per Cent 69 8 9 3 2	Per Cent 51 20 14 4 1
	Tortillas Pulque Beans Chile Vegetables and fruits Meat	Tortillas Pulque Chile Greens, vegetables, and fruits Meats		Tortillas Pulque Greens Beans Other vegetables	Tortillas Pulque Greens Other vegetables Meats

*Taken from R. E. Anderson, M.D., et al., "A Study of the Nutritional Status and Food Habits of Otomi Indians in the Mezquital Valley of Mexico," *American Journal of Public Health and the Nation's Health*, XXXVI, No. 8 (1946), 888. The relative importance of the foods varied little with age except for pulque, the consumption of which increased gradually to a maximum in adult males.

† Calculated on the basis of alcohol and protein content. The contribution of pulque to total calories is probably a little greater, since it may contain other caloric substances.

more information concerning the food habits of the people before recommendations for change may be made. If substitutions are made without considering the effect on the total content and nutritive value of the diet, there is danger that the diet may be thrown out of balance, resulting in more serious deficiencies than now exist.

CLOTHING

The type of dress in rural Mexico varies from one area to another. In the northern states modern European dress tends to be much more characteristic than in the states farther south. Likewise, modern dress

TABLE 63

SUMMARY OF AVERAGE INTAKES OBSERVED IN THE DIETS OF INDIANS IN THE MEZQUITAL VALLEY OF MEXICO COMPARED WITH RECOMMENDED INTAKES FOR AVERAGE PERSON*

	Cal- orics	Pro- tein (Gm.)	Cal- cium (Gm.)	Iron (Mg.)	Vita- min A (I.U.)	Thia- min (Mg.)	Ribo- flavin (Mg.)	Nia- cin (Mg.)	Ascor- bic Acid (Mg.)
Recommended National Research Council intakes corrected for age and sex distribution of group studied	2,430	64.0	0.96	11.4	4,331	1.19	1.66	11.9	68.1
Average intake observed	1,706	51.0	0.82	23.2	5,498	1.61	0.69	9.4	96.3
Percentage of recommended intake.	70	80	85	203	127	135	42	79	141

* Taken from R. K. Anderson, M.D., *et al.*, "A Study of the Nutritional Status and Food Habits of Otomí Indians in the Mezquital Valley of Mexico," *American Journal of Public Health and the Nation's Health*, XXXVI, No. 8 (1946), 898.

tends to prevail in the cities and larger towns, while what may be called the "Indian-Colonial" type of dress becomes increasingly prevalent as one goes out from the city to the more isolated rural districts. This does not mean that the "Indian-Colonial" type of dress is entirely absent from the cities; it is merely that the relative proportion is much smaller than in the rural districts. On the other hand, there are usually a few individuals who use modern European dress even in the more isolated regions. This is likely to be true of large property owners, rural schoolteachers, and some of the shopkeepers. It is not clear how much of this variation is due to differences in socioeconomic status and how much to the fact that such persons are likely to have had greater opportunities for contact with urban and modern culture. A number of investigators have reported that within certain isolated Indian communities there is little relation between wealth and daily

dress; the principal differences are apparent only on occasions of fiesta when the more wealthy are likely to display more elaborate and colorful costumes and a relatively greater number of objects of ornamentation.²¹

The influence of modern dress in the north extends approximately as far south as an imaginary line extending from the city of Tampico on the coast of the Gulf of Mexico westward to the city of Aguascalientes and on to the Pacific Coast. North of this imaginary line it may

TABLE 64

POPULATION OF MEXICO CLASSIFIED ACCORDING TO TYPE OF FOOTGEAR WORN, BY SEX AND SIZE OF COMMUNITY*

TYPE OF FOOT- GEAR WORN, BY SEX	TOTAL POPULATION		SIZE OF COMMUNITY			
			Localities of over 10,000 Inhabitants		Localities of 10,000 or Less Inhabitants	
	No. of Persons	Per Cent	No. of Persons	Per Cent	No. of Persons	Per Cent
Total.	19,653,552	100 0	4,308,240	100.0	15,345,312	100.0
Shoes.	9,790,349	49 8	3,960,671	91 9	5,829,678	38.0
Huaraches . .	4,629,959	23.6	151,797	3 5	4,478,162	29.2
Barefooted. .	5,233,244	26.6	195,772	4 5	5,037,472	32.8
Males.	9,695,787	100.0	1,992,016	100 0	7,703,771	100.0
Shoes.	4,020,014	41.5	1,783,781	89 5	2,236,233	29.0
Huaraches. .	3,680,487	38.0	125,021	6.3	3,555,466	46.2
Barefooted. .	1,995,286	20 6	83,214	4.2	1,912,072	24.8
Females.	9,957,765	100.0	2,316,224	100.0	7,641,541	100.0
Shoes.	5,770,335	57.9	2,176,890	94.0	3,593,445	47.0
Huaraches. .	949,472	9.5	26,776	1 2	922,696	12.1
Barefooted. .	3,237,958	32.5	112,558	4 9	3,125,400	40.9

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

be said that modern dress tends to prevail except for the wearing of huaraches instead of shoes in some localities and except for certain regions inhabited by isolated indigenous groups, such as the Tarahumaras of southwestern Chihuahua.

The vast majority of Mexican peasants, however, inhabit that portion of Mexico corresponding to the regions south and east of the imaginary line projected above. In the rural areas of these regions only a very small proportion wear shoes. The great majority either go barefoot or wear huaraches, a type of sandal made from leather, mag-

21. Lucio Mendieta y Núñez, *La Economía del Indio* (Mexico City, 1938), p. 54.

ney fiber, more recently from discarded automobile tires, or from some other material.

For the Republic as a whole, about half the population wear shoes, 26.6 per cent go barefoot, and 23.6 per cent wear huaraches (Table 64). The proportion wearing shoes is considerably greater for women than for men, but the proportion of females who go barefoot is also much greater than for men. About one out of three females in the Re-

TABLE 65
INHABITANTS OF MEXICO CLASSIFIED ACCORDING TO TYPE OF FOOT-
GEAR WORN, BY REGIONS AND BY SIZE OF COMMUNITY*
(Percentage Distribution)

SIZE OF COMMUNITY BY REGIONS	TYPE OF FOOTGEAR WORN			
	Total	Shoes	Huaraches	Barefoot
Total Mexico	100	49.8	23.6	26.6
North Pacific	100	68.0	25.9	5.3
North	100	74.1	19.5	6.3
Central	100	49.5	26.8	23.7
Gulf	100	43.2	14.2	42.6
South Pacific	100	12.9	25.5	61.6
Localities of over 10,000 in- habitants	100	91.9	3.5	4.5
North Pacific	100	93.5	4.8	1.7
North	100	96.9	2.0	1.1
Central	100	92.3	3.6	4.1
Gulf	100	86.8	4.0	9.3
South Pacific	100	62.3	9.4	28.3
Localities of 10,000 or less in- habitants	100	34.0	29.2	32.8
North Pacific	100	63.7	30.3	6.0
North	100	67.2	24.9	7.9
Central	100	32.4	35.9	31.3
Gulf	100	34.3	16.3	49.4
South Pacific	100	10.6	26.2	63.2

* Data from *Censos de Población*, 1924. Dirección General de Estadística.

public go barefoot, as compared with one out of every five males. Generally speaking, women do not wear huaraches; they either go barefoot or wear shoes. On the other hand, 38 per cent of all males wear huaraches. In localities with fewer than 10,000 inhabitants, a smaller percentage of the total population wear shoes and a larger proportion go barefoot or wear huaraches. If data were available for the strictly rural population, it is likely that among the strictly rural inhabitants the percentage wearing shoes would be very low. Regional differences are apparent from Table 65 and Figure 27.

As the population of the country grows, the main type of footwear

to another. Generally speaking, the following items tend to characterize the dress of the peasant throughout most of rural Mexico south of the city of Aguascalientes.

MEN'S DRESS

Men usually wear pajama-like trousers (*calzones*), which are made of thin, white cotton cloth. They have no buttons, but the two sides of the fly overlap and contain strings which are fastened to hold them up. Often they are suspended by a woven belt or a sash about 6 inches

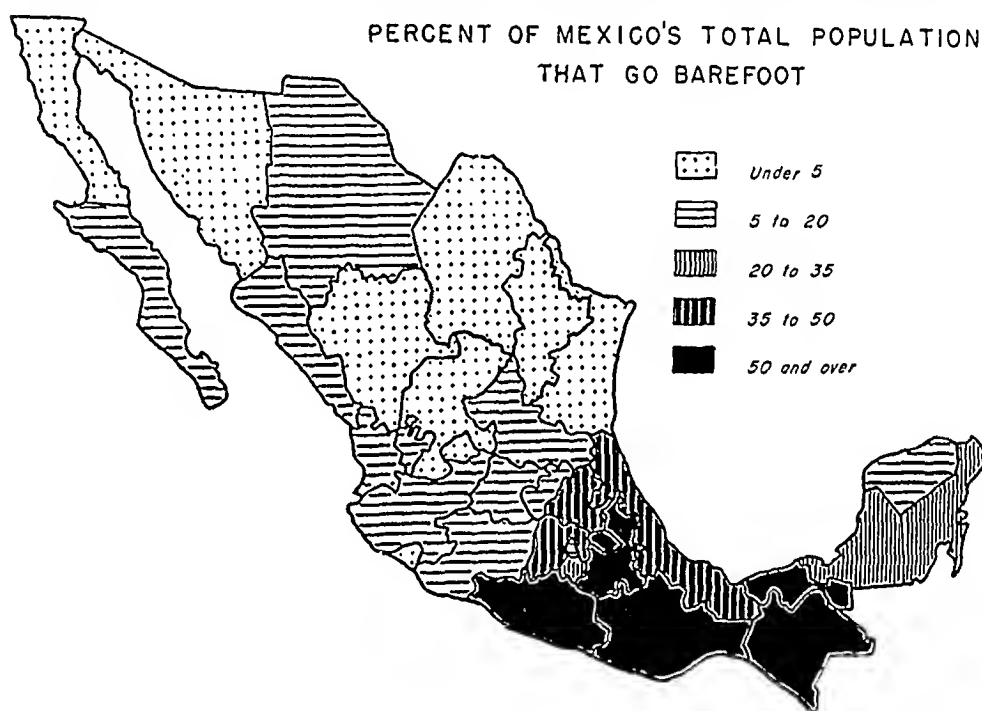


FIG. 27.—Percentage of Mexico's total population going barefoot, by states. Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

in width. In some areas, more especially in the states of Guanajuato, Querétaro, and neighboring districts, men wear a small white v-shaped apron.

On the upper part of the body is worn a shirt made of the same material as the calzones. It also is without buttons and usually hangs loose outside the trousers. Sometimes a jacket of the same material is worn in cold weather. Almost invariably a straw hat conforming to one of the many local or regional patterns found in different parts of the country is worn (for examples of men's dress see Pl. V).

Finally, a serape, or woolen blanket, is used to keep out the cold and rain. It often serves as a bed at night. There are, in general, two distinct types. One is in the shape of a regular blanket and is wrapped

around the body and held together with one hand. The other, known as the "poncho," has a slit in the middle large enough for the head to pass through. Whereas both types are widely distributed in central and southern Mexico, the poncho is seldom found in the north. The serape is indeed a most useful article. It serves as coat, topcoat, raincoat,²² overcoat, and bed. Men and boys are seldom without it.

WOMEN'S DRESS

Women's clothing shows greater variability from one region to another than does men's. Frequently it consists of a long, full skirt of colored or black cotton cloth extending to the ankles, an underskirt, and a blouse which hangs loosely from the shoulders. Usually a collarless shirt is worn under the blouse, and sometimes white cotton drawers are also worn.²³ The blouses vary in style from one region to another. In some areas they are decorated with lace or embroidery of various colors and are known by the Indian term of *huipil*. Examples of this may be found in the region of the Isthmus of Tehuantepec and the Yucatán Peninsula. Often the blouses extend only to the waist, but in Yucatán they extend below the knee. Women do not wear hats, but they almost invariably wear a *rebozo*, a large shawl, usually dark blue, which either hangs loosely over the head and shoulders or is wrapped about them (see upper part of Pl. VII). In parts of the state of Oaxaca the *rebozo* is wound around the head in the form of a turban. The *rebozo* serves a variety of functions. One of its most common uses is for carrying babies. By means of it the baby is tied to the mother's back and in this position accompanies her wherever she goes. Even while working about the home the mother often performs her daily routine with the baby strapped to her back. The *rebozo* serves, also, as about the only protection to the women against inclement weather, although it is so very thin and small that it is inadequate for this purpose. On a cold day the little boy and his father may be seen wrapped snugly in serapes, while the mother is usually without such protection because the serape is considered masculine wearing apparel.

REGIONAL EXAMPLES

Perhaps a few illustrations from different areas drawn from studies made by recognized scholars will serve to indicate similarities and dif-

22. In some areas a raincoat made of grass or palm leaves is used. This is common among the Indians in the vicinity of Lake Pátzcuaro.

23. Robert Redfield, *Tepoztlán—a Mexican Village* (Chicago, 1930), p. 44.

ferences in types of dress. The following observations are all drawn from studies representing areas of rural Mexico south of the city of Aguascalientes.

The peninsula of Yucatán

The usual costume of the Mayan Indian of today and of the Mestizo laborer is very uniform. It consists of a pair of short, loose drawers of white cotton which are tied around the waist with tape. Over this is wound a towel having narrow blue and white stripes. The corner of the towel is tucked in over one hip leaving an open slit at the side. In remote villages the towel is dispensed with. The trunk is covered with a plain, white, collarless tunic which is buttoned up at the neck and which hangs loosely from the shoulders to the hips. The sleeves may be short or long. A soft straw hat with wide, curving brim sets well down on the head. The lower legs and feet are bare, as a rule, but sandals may be worn. The hair is cut moderately short. . . .

Women wear the *huipil*, a loose garment of white cotton which hangs from the shoulder to the middle of the lower leg. There is a large opening at the neck, and the top of the garment hangs like a sleeve over the upper arm. Across the front and back and over the shoulders runs a band of embroidery in bright colors and another band encircles the lower part of the skirt, which usually has scalloped edges. The edge of a petticoat extends a couple of inches below the *huipil*. The head is ordinarily uncovered, the hair combed straight back and done into a tight knot behind. The feet usually are bare.

For a fiesta the most beautifully embroidered *huipil*, immaculately white, and slippers are put on, but stockings are not worn. The head is covered with a scarf (*rebozo*), usually of striped, brownish cotton, but sometimes of brighter color, a gold chain with a pendant carrying a sacred image is hung around the neck, and earrings are commonly worn.

Small boys wear a pair of short drawers and little girls run about the villages wearing only a piece of cloth wound around the hips with the corner tucked in at the side. Their disheveled hair hanging to their waists and the timid glances or precipitate flight at sight of a stranger makes them seem like wild creatures of the woods. Within a very short time, however, the little girls have all been caught by their mothers and, when seen again, they are wearing miniature *huipils*.²⁴

The valley of Teotihuacán

In spite of the contact of the Indian with white men, we do not believe that Indian costume has changed much since shortly after the Conquest. Thus we see at the present time the Indians of Teotihuacán wearing daily a shirt and calzones made of coarse cotton cloth, held by a belt. The men cover their head with a straw hat. Usually they go barefoot, but sometimes they wear huaraches, and for special occasions they wear shoes without socks, tight trousers and a shirt made of percale or coarse cotton cloth. In the wintertime, they also wear a blanket which serves as a coat.

24. George Shattuck, *The Peninsula of Yucatán—Medical, Biological, Meteorological, and Sociological Studies* (Washington, D.C.: Carnegie Institution of Washington, 1933), pp. 59, 60.

The women's dress consists of a blouse, one or several underskirts and a *rebozo* (shawl). The *chincuete* and the *huipil*, genuinely Indian garments, have disappeared from this region.

Indian women also wear necklaces, earrings, rings, etc., of foreign manufacture and low cost.

The small number of the well-to-do, made up of whites and mestizos, wear modern European clothes, more or less varied, according to their means.

The children of Indian origin, when very young, almost always go naked, and they do not start wearing clothes until they are four or five years old.

We do not believe that any improvement has taken place in clothes, which are such an important factor in the life of the Indians, not so much due to tradition as to their precarious economic situation.²⁵

The Tarascan Indians of Michoacán

At the present time, the clothes of the Tarascan Indian consist of a shirt and calzones made of coarse cotton cloth, linen sash, leather huaraches, straw or *paniqua* hat, and woolen blanket. The shirt and the calzones are of white cloth, the sash is in bright colors.

The penetration of certain items of modern dress may be observed now among the Tarascan Indians. Thus, many of them have started to wear shoes instead of huaraches, and trousers made of pepper-and-salt cloth like the ones worn by the workers in the cities. The wearing of felt hats is also noticed; but in general the Tarascan peasant's clothes are as described above.

A coat made of *tule* is still used as a protection from the rain.

The dress of the women consists of an embroidered blouse with short sleeves, called a *huanengo*, which is a modification of the one introduced by the Spaniards during Colonial times; a pleated skirt made of cotton cloth up to five meters in length, on top of which they wear another skirt of dark blue wool, known as a *sabanilla* which has up to twenty-five meters in length and is folded in the back to form what is known as a *rollo* (roll). The luxury of the dress is determined by the length of the *sabanilla*. They also wear woolen sashes with Grecian frets embroidered in bright colors. As a modern item of dress, they also wear an apron. They always go barefoot and cover their chest with a *rebozo* (shawl).

They adorn themselves with coral or glass necklaces and weave colored ribbons into their braided hair.²⁶

The Village of Tepoztlán, Morelos

A man wears one or more shirts and over these, when the weather is colder or for better dress, a blouse. These, like the trousers, are made of cheap white cotton cloth bought in the local stores and are made up by the women. The blouse is buttonless; the lower ends tie together in front. For holiday attire the shirt may be pink or blue, or a colored vest may be added. Loose white trousers of the same material are worn. These are wide at the waist; the sides are crossed

25. Manuel Gamio, *La Población del Valle de Teotihuacán* (3 vols.; Mexico City, 1922), II, 186. Some change may have taken place as a result of Dr. Gamio's study.

26. Lucio Mendieta y Núñez (ed.), *Los Tarascos* (Mexico City, 1940), p. xlv.

in front and the trousers are held up by a cloth belt or sash. A man often goes barefoot. The sandals are of the ancient pattern except that steer leather is used. A woman does not wear sandals except when traveling. The straw hat, worn almost everywhere in Mexico, is of course of Spanish origin. A few styles are "correct" in Tepoztlán.

It remains to mention the *zarape*. . . . In Tepoztlán two forms are worn: the blanket form, wrapped around the shoulders and held together with one arm, and the *poneho* form, in which the head passes through an opening in the center. The *zarape* is entirely masculine, but on unusually cold days a woman may borrow a *zarape* and wear it beneath her *rebozo*.

The machete, the characteristic Mexican steel knife with the curved tip, is so generally carried that it may be mentioned as a part of the costume.

. . . . In Tepoztlán the woman's costume is European in origin, and the names of the garments in Nahuatl discourse are Spanish, except those for the skirts, which are descriptive Nahuatl terms.

Over white cotton underdrawers is worn an underskirt, usually also white, and over this a colored overskirt. The skirts are ankle length, very full, and gored. A collarless shirt, tucked into the skirt, covers the upper part of the body. Over it is worn a blouse, and over this usually an apron. This either includes an upper piece covering the chest, when it is called *babero* . . . or does not, when it is called *delantal*. . . . Around the waist is wound a sash, dark blue or gray, about eight inches wide and six to ten feet long. . . . Almost invariably there are earrings, often of gold, and a short string of beads, most commonly red seeds. Except when walking long distances, when sandals may be worn, or when in city dress, which includes shoes, the feet are bare. The only overgarment is the *rebozo*, a sort of shawl worn over the head and upper body; one end is drawn across the breast and thrown back over the left shoulder. This is the characteristic Mexican garment worn almost everywhere and by every class except the highest. The *rebozo*, like the *zarape*, is a post-Conquest development, but unlike the *zarape* it has no Indian progenitor. It probably represents a cheaper and more practical modification of the Spanish mantilla by the working Indian woman; and it had already taken its form by the end of the sixteenth century.

Many women possess, for Sunday costume, a one-piece dress of finer material. This is nearly always white, with a flounced skirt, and ornamented with pink or blue ribbons.

No woman ever wears a hat except when a man's hat is worn for work in the fields or traveling in the sun. When sitting in the sun a woman may wind the *rebozo* on her head like a turban, but the real turban headdress frequently found in southern Mexico is absent. The hair is worn in two braids, or, particularly by girls and young women, in a single braid.²⁷

The cost of such clothing as has been described above varies greatly according to the type of cloth used and according to local patterns of construction. Mendieta y Núñez estimates that each person is likely to have at least two outfits of clothing which are expected to last for

27. Redfield, *op. cit.*, pp. 42-45. For other areas, see Carlos Basauri, *op. cit.*; also Mendieta y Núñez, *La Economía del Indio*.

a period of about one year. He estimates that among the indigenous groups the average cost of clothing for one person is about ten pesos per year. He points out, however, that among certain groups in which elaborate costumes are used, the expense may be multiplied many fold. The cloth for one of the skirts worn by wealthy Tarascan women, for example, is said to cost from 30 to 50 pesos.²⁸ Similar luxurious dress is found in isolated instances among other groups, but such expensive clothing is, of course, very unusual among the peasants as a whole. Mendieta y Núñez points out that at the other extreme are found groups of Indians, such as some of the Otomies of Hidalgo, the Mixtecos of Oaxaca, and the Lacandones of Chiapas, who "dress in rags and often go half-naked."²⁹

Some students are of the opinion that, while the types of dress used may be adequate in the tropical areas where it is warm and where heavy clothing is unnecessary, they may be inadequate from the standpoint of health in the colder climates of the Central Mesa and in the mountainous areas of other regions. There is often freezing weather in the Central Mesa in the wintertime, and when a *norte* ("norther") blows in over the mountains the thin cotton wearing apparel offers little protection against the weather. This statement would appear to be much more applicable to women's clothing than to men's, for, as indicated previously, the man has the ubiquitous woolen serape which offers him protection, while the woman has no such article. Students of health point with alarm to the tremendously high pneumonia rate in the central area³⁰ and assert that much of it may be due to lack of warm clothing, on the one hand, and to inadequate housing, on the other.

It is possible that the wearing of huaraches and going barefoot are sources of a good many ailments, including parasitic diseases, bites, and infections from bruises. In southern Mexico, parasites known as *niguas* often bore into the toes under the toe nails and unless immediately removed may cause considerable damage to the toes. Some investigators advocate a definite policy of supplanting the huarache by a cheap type of shoe. Such is the suggestion of Gamio:

A campaign which should be actively conducted is one tending to have the huarache replaced by the shoe, thus avoiding diseases as dangerous as uncinariasis and accidents as troublesome as those caused by jigger fleas and other parasites. What could be done here is what is done in the Orient, for instance, in Japan, where cattle are very scarce and leather expensive, and where the shoes of the rural inhabitants and even to some extent those of the urban population,

28. *La Economía del Indio*, p. 52.

29. *Ibid.*, p. 52.

30. See chap. xiv.

are made of a strong, flexible and cheap cotton cloth. In Mexico, there should be mass production of low cost shoes having leather or rubber soles and the upper part made of canvas.³¹

In the author's opinion, there is need for more scientific study of both diet and clothing in relation to their regional variations and adaptations to local climatic conditions before widespread recommendations for change may be made. The mere replacing of calzones by overalls may not result in any improvement, especially in the warmer climates where calzones are probably much more comfortable. If huaraches are more comfortable than shoes, as many peasants claim, there is no reason why the former should be replaced by the latter, unless it can be clearly demonstrated that the health of the wearer will be significantly more safeguarded by such change. This can be determined only by careful investigation. In some respects the Indian type of dress appears to be better adapted to the local environment than does the European-type dress. This is especially true in the more tropical regions.

31. Gamio, *Algunas consideraciones sobre la salubridad y demografía en México*, p. 35.

Health and Mortality

ONE of the most important indices of the levels of living of a given country is the mortality and health of its people in comparison with that of people in other countries. If the levels of living are high, one might assume that a reasonable adaptation of the techniques of living to the physical environment had been made and that the control of disease and death would be somewhat comparable to that of people living on a high plane in other countries. On the other hand, if the levels are low, one might expect to find a poor adaptation of techniques to environment and a consequent reflection of this in a high incidence of disease and death. Judged in terms of this criterion, the population of Mexico as a whole would appear to be living on a comparatively low plane. The death rate is high in comparison with other countries, but there is hope for the future in the fact that in recent years it has been declining.

MORTALITY RATES

The death rate for the year 1943 was 22.4 per thousand inhabitants. This is more than twice as high a rate as was found in the United States in the same year, when it was 10.9. The average annual death rate in Mexico for the five-year period 1939-43 was 22.7 per thousand inhabitants. This rate appears high even when compared with death rates in other Latin-American countries. For example, the death rates in 1943 in the following countries were: Guatemala 22.2, El Salvador 20.4, Chile 19.9, Colombia 17.6, Venezuela 16.0, and Argentina 10.5.

In order to appreciate the impact of Mexico's death rate on community life, we might devise a homely illustration and assume for the moment that the deaths which occurred in 1943 were distributed among the various communities exactly in proportion to their total number of inhabitants. If this were the case, a village with a total population of only 2,321 inhabitants would be confronted with the task of holding a funeral for one of its members every week through-

out the entire year. A community with a total population of 16,295 would bury one of its members every day in the year. However, the deaths are not distributed in strict accordance with the size of the community. They vary according to a great many factors. Among inhabitants having a given level of cultural development, the death rate may vary according to the age composition of the population, regional and climatic factors, and local economic conditions, to mention only a few of the many influences that may have a bearing. The illustrations cited above are therefore in terms of the average death rates

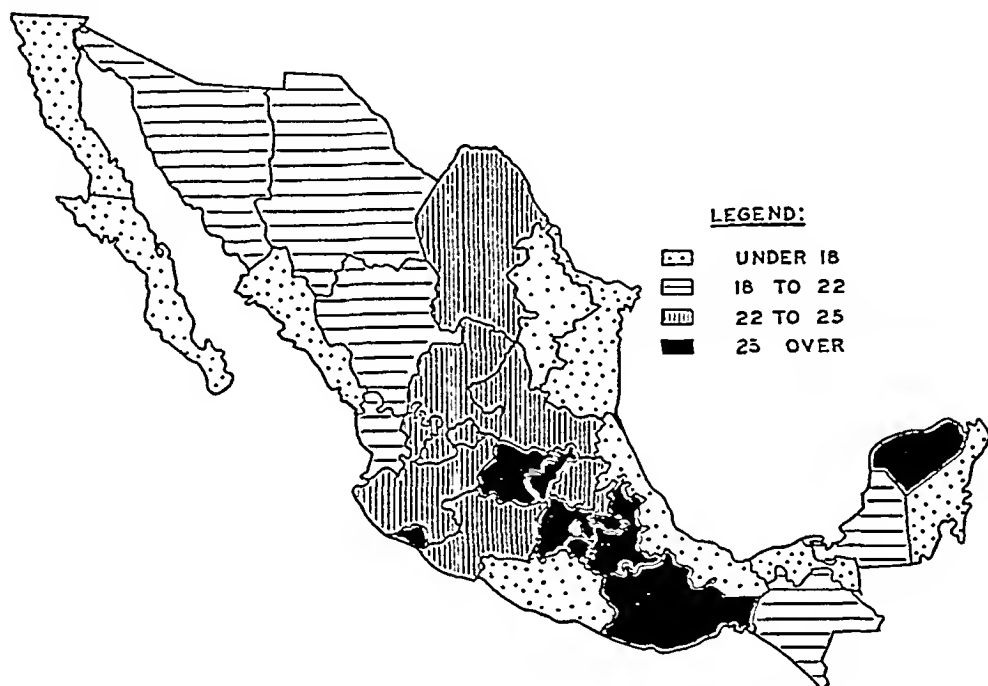


FIG. 28.—Number of deaths in Mexico per 1,000 inhabitants, by states; five-year average, 1939-43. Based on Appendix A, Table 36.

for the entire country and are not directly applicable to any one community. In some communities the rate will be much higher and in others much lower than that indicated in the above illustrations. The average death rates for the five-year period 1939-43 are shown for the various states in Figure 28 and Appendix A, Table 36. Generally speaking, the highest rates are found in the central region, where there is only one state with a rate as low as the national average of 22.7—this is Michoacán with 22.3. The highest rate in the Republic for the five-year period is in the state of Guanajuato, with 30.2 deaths per thousand inhabitants. Assuming the same conditions as in the foregoing illustrations, a village with only 1,722 inhabitants located in the state of Guanajuato could expect to witness a death ever week.

year, while a death for every day in the year could be expected in a community with 12,086 inhabitants.

The region with the lowest death rate for the five-year period is that of the north Pacific, with an average of only 17.5 deaths per thousand inhabitants. This region is followed closely by the Gulf states, which have 19.0. The north region has a rate of 20.1 and the south Pacific 22.4.

Although Mexico's death rate is very high in comparison with the United States, there is reason for optimism in the trend over a period of years. Since 1929 there has been a rather consistent downward

TABLE 66
NUMBER OF DEATHS PER THOUSAND INHABITANTS IN
MEXICO FROM 1922 TO 1944, BY YEARS*

Year	Deaths	Year	Deaths
1922.....	25.3	1934.....	23.9
1923.....	24.4	1935.....	22.7
1924.....	25.6	1936.....	23.7
1925.....	26.5	1937.....	24.6
1926.....	24.9	1938.....	23.1
1927.....	24.0	1939.....	23.2
1928.....	25.3	1940.....	22.8
1929.....	26.8	1941.....	22.1
1930.....	26.6	1942.....	22.8
1931.....	25.9	1943.....	22.4
1932.....	26.1	1944.....	20.6
1933.....	25.8		

* Data from Dirección General de Estadística.

trend in the rate. It has declined from 26.8 in 1929 to 20.6 in 1944 (see Table 66 and Fig. 29).¹ This is an encouraging sign, which it is hoped may continue in the future.

INFANT MORTALITY

Infant mortality plays an important role in the high death rate in Mexico. In 1941 about one-fourth of all deaths in the entire Republic (24.2 per cent) were of children under one year of age. During the same year, 46.9 per cent of all deaths were attributed to children under five years of age. In other words, nearly half of all deaths in the nation in 1941 consisted of children under five years of age. During the five-year period 1939-43, the average annual infant mortality rate was 121. This means that about one child out of every eight born died before reaching the age of one year. The infant mortality rate in the

1. Preliminary data suggest that it may have declined to 18.6 in 1945.

United States in 1943 was 40. This indicates that about three times as many babies die in Mexico each year (per 1,000 live births) as in the United States.

Although the infant mortality rate is very high in Mexico, it is lower than in some of the other Latin-American countries. Chile, for instance, reported a rate of 194 in 1943, and Ecuador 136 for the same

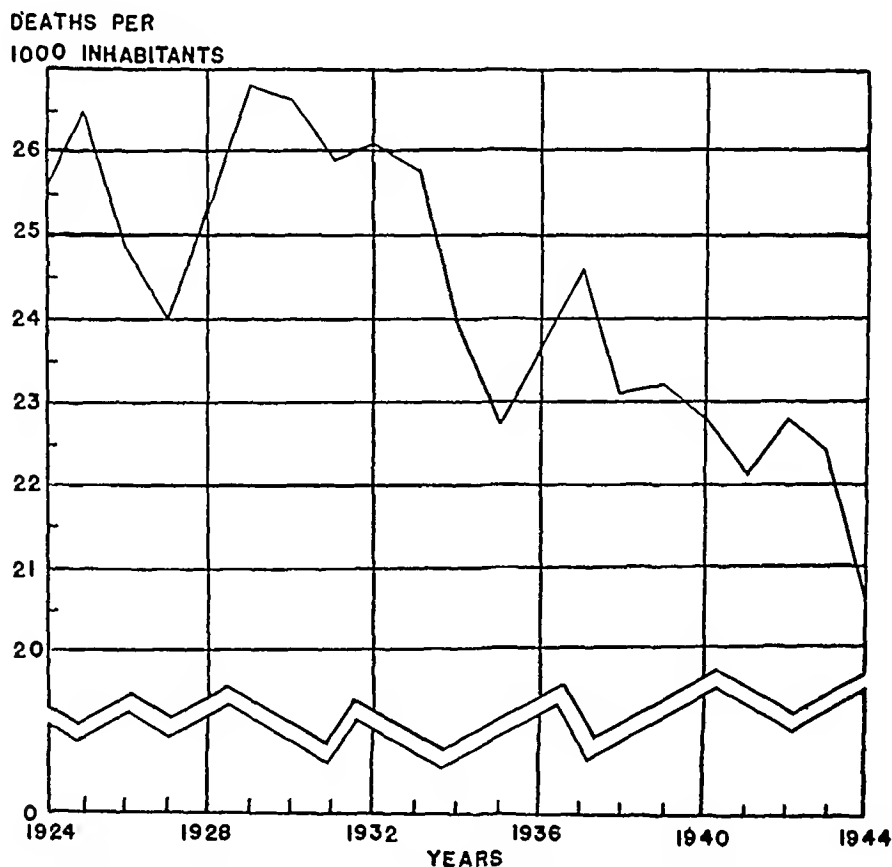


FIG. 29.—Number of deaths per 1,000 inhabitants, by years, 1924-44

year. The rate in Costa Rica was 117, in El Salvador 110, in Venezuela 109, and in Argentina 78.

The infant mortality rate in Mexico varies with the states and regions, as is true with the total death rate. The highest average rate for the various regions during the five-year period 1939-43 is found in the central region, where it is 142 (Appen. A, Table 37). In this region, where 48.0 per cent of the total population of Mexico resides, more than one baby out of every seven born alive dies before it reaches one year of age. In the Distrito Federal the infant mortality rate is higher than for any other state or territory in the Republic. Here it reaches

179, which is equivalent to saying that more than one-sixth of all children born die under one year of age.

Fortunately, the infant mortality rate for the country as a whole has also declined in recent years (Table 67). In 1922 it was recorded as 223.1 per thousand live births; this had declined to 117 in 1943. Much of this decline, however, may represent improvement in birth registrations rather than an actual decrease in the number of deaths. The infant mortality rate is computed by dividing the number of births registered in a period of one year into the number of deaths of children under one year of age for the same year, multiplied by one thousand. Thus the accuracy of this rate is influenced not only by the

TABLE 67
NUMBER OF DEATHS OF CHILDREN UNDER ONE YEAR OF
AGE PER THOUSAND LIVE BIRTHS IN MEXICO
FROM 1922 TO 1943, BY YEARS*

Year	Deaths	Year	Deaths
1922.	223.1	1933.	139.3
1923.	222.4	1934.	130.3
1924.	232.2	1935.	125.7
1925.	215.9	1936.	130.8
1926.	209.4	1937.	130.8
1927.	193.0	1938.	128.0
1928.	193.4	1939.	122.6
1929.	167.6	1940.	125.7
1930.	131.6	1941.	123.0
1931.	137.7	1942.	118.0
1932.	137.5	1943.	117.0

* Data from Dirección General de Estadística.

number of deaths recorded but by the number of births registered as well. An underregistration of births will tend to increase the infant mortality rate, while a more accurate recording of births will lower it if it was previously based on underregistration. The author feels certain that the abrupt decline noted in Table 67 from 232.2 in 1924 to 131.6 in 1930 reflects mostly the improvement in statistics on infant mortality. The decline noted since 1930 is probably much nearer reality. Some of the differences noted among regions may also reflect differences in the accuracy of registration.

RURAL-URBAN DEATH RATES

According to official records, the death rate is higher in the urban areas than in the rural. In 1943 there were recorded 25.2 deaths per thousand inhabitants in the urban areas of the Republic as compared

with only 21.0 in the rural areas (Appen. A, Table 38). The rural rate was lower in twenty-six of the states and territories, while the urban rate was lower in only six. Four of the six states in which the urban rate was lower are situated in the central region—Aguascalientes, México, Puebla, and Tlaxcala. The other two are Yucatán in the Gulf region and Oaxaca in the south Pacific region.

The relatively lower rural death rate in comparison with the urban for the country as a whole is in keeping with the findings of studies in a great many other countries,² although the author doubts that the actual difference in Mexico is as great as that officially recorded. This is due to the fact that in some instances the death rates for rural areas are so low, in comparison with those in adjoining states or those of urban areas of the same state, as to cast doubt on the completeness of death registration in these instances. In some cases the rural death rate is recorded as being less than half as great as that recorded for the urban areas of the same states. These areas include (1) the territory of Baja California Norte, which records a rural rate of 12.0 and an urban rate of 24.2; (2) the territory of Quintana Roo, which records a rural rate of 14.2 and an urban rate of 28.5; and (3) the state of Tamaulipas, with a rural rate of only 9.0 and an urban rate of 22.2. The rates for the rural areas of these states are lower in relation to the urban areas of the same states than can be accounted for in terms of differences in density of population or other factors. For example, in 1940 the largest city in Baja California Norte had 18,775 inhabitants; the largest city in Quintana Roo had only 4,672 inhabitants; and the largest in Tamaulipas had 82,475 inhabitants. The most plausible explanation, therefore, seems to be that the deaths in the more isolated areas of these states, and perhaps in some other states as well, were not all reported, despite the existence of severe penalties for those who bury their dead without official authorization. Just how large such errors are and to what extent they would account for the rural-urban differences noted it is impossible to say.

It should be pointed out that the areas mentioned all contain a low density of population, and the effect of their underregistration on the total death rate of the country might be insignificant. If, however, underregistration also occurs in some of the more isolated areas of other states, the effect on the total recorded death rate might be appreciable, and it would mean that the rates should be revised upward. The author is of the opinion that, even with complete data on all rural

2. See P. A. Sorokin, C. C. Zimmerman, and C. J. Galpin, *Systematic Source Book in Rural Sociology* (Minneapolis, 1932), Vol. III, chap. xix.

deaths, the rural death rate in Mexico would probably remain slightly lower than the urban death rate. Numerous studies in other countries seem to suggest that the greater comparative lack of medical facilities in the country districts is more than counterbalanced by the relatively greater problems of sanitation, lack of fresh air, indoor work, and contagious infection that are usually associated with congested urban living.

TABLE 68
EXPECTATION OF LIFE IN MEXICO, 1930 AND 1940*

YEAR OF AGE	AVERAGE NO. OF YEARS OF LIFE REMAINING AT BEGINNING OF YEAR OF AGE			
	1930	1940		
		Total	Male	Female
0.....	36.26	39.04	37.92	39.79
1.....	42.21	45.35	44.43	46.22
2- 4.....	44.68	47.90	46.88	48.88
5- 9.....	47.26	49.75	48.55	50.90
10-14.....	44.92	46.67	45.43	47.86
15-19.....	41.14	42.58	41.34	43.75
20-24.....	37.59	38.79	37.56	40.01
25-29.....	34.38	35.47	34.22	36.69
30-34.....	31.25	32.17	31.00	33.31
35-39.....	28.24	28.92	27.88	29.95
40-44.....	25.24	25.73	24.82	26.60
45-49.....	22.23	22.59	21.86	23.29
50-54.....	19.31	19.48	18.96	19.99
55-59.....	16.35	16.42	16.11	16.73
60-64.....	13.57	13.44	13.35	13.54
65-69.....	11.19	10.90	10.88	10.92
70-74.....	9.02	8.57	8.68	8.48
75-79.....	7.27	6.85	7.02	6.72
80-84.....	5.71	5.13	5.36	4.96
85-89.....	4.20	3.75	3.93	3.62
90-94.....	3.85	2.91	3.22	2.71
95-99.....	3.27	2.12	2.45	1.87

* Data from Instituto de Salubridad y Enfermedades Tropicales.

LIFE-EXPECTANCY

In 1940 the average person born in Mexico could expect to live about thirty-nine years (Table 68). Females generally have a longer expectation of life than males. Males born in Mexico in 1940 could expect to live an average of 37.9 years and females 39.8. In the United States the average child born in 1940 could expect to live 63.8 years. Thus the average child born in Mexico in 1940 could expect to live only 61 per cent as long as one born in the United States the same year.

Although the period of life-expectancy in Mexico is much lower than in the United States, it is gradually lengthening. It increased from 36.3 in 1930 to 39 years in 1940. It has probably continued to increase since 1940.³

CAUSES OF DEATH

Obviously, the fundamental or crucial causes of death are complex and impossible to separate from the various contributing factors that intervene in one way or another from the very hour of birth. For the present the term "cause" is used merely with reference to the principal diseases or infirmities listed in the mortality statistics as being responsible for the deaths as diagnosed by whatever symptoms and by whatever personnel were available. Adequate medical diagnosis has not been made in most cases, especially in the more isolated rural districts, and often the reported cause of death represents nothing more than a guess on the part of the family of the deceased. The accuracy of these guesses would depend entirely on the family's familiarity with the symptoms in question. We should guard against interpreting the alleged causes too rigidly. The ten principal causes which, on the average, were most important during the five-year period 1938-42 are listed in order of importance for the country as a whole by regions in Table 69. The four principal causes are as follows: (1) diarrhea and enteritis, which account for one-fifth of all deaths; (2) pneumonia, which accounts for 15.0 per cent; (3) malaria, which accounts for 5.6 per cent; and (4) violent or accidental causes, which account for 5.2 per cent of all deaths.

DIARRHEA AND ENTERITIS

This disease is more widespread and accounts for more deaths than any other in Mexico. It is listed first in every region. There is not a state in the Republic where it does not account for at least 10 per cent of all deaths. In four states it accounts for one-fourth or more of all deaths. It is responsible for one-fourth of the infant mortality of the entire country.

3. Data on life-expectancy has been computed for a few other localities in Latin America for different periods. These are not directly comparable with the Mexican data. The expectation of life at birth among the total population of Chile was 41.2 years in 1939; it was 39.25 years among the native population of Brazil in 1890-1920; 43.04 years for the Federal District of Brazil in 1939-40; 46.30 years in seven departments of Colombia in 1939-41; 38.97 years in the city of Lima, Peru, in 1933-35; and 44.23 years in the city of Caracas, Venezuela, in 1937-39. Data from H. S. Dunn, H. T. Eldridge, and N. P. Powell, "Demographic Status of South America," *Annals of the American Academy of Political and Social Science*, January, 1945, p. 28.

The causes of diarrhea are probably to be found in the diet, in the water used for drinking purposes, and in the lack of sanitation. There undoubtedly is still considerable truth in the statement published by the Department of Public Health sometime ago: "Of the thousands of children who die every year among us . . . it may be said that many, perhaps the majority, die solely as a consequence of stupid 'methods' of feeding. . . . Almost all of these deaths are nothing less than homicides . . . to be charged up to the ignorance of our poor people, to their extreme misery. . . ."⁴

TABLE 69
PERCENTAGE OF ALL DEATHS IN MEXICO DURING 1938-42, ATTRIBUTED
TO THE CAUSES LISTED, BY REGIONS*

CAUSE OF DEATH	TOTAL MEXICO	REGION				
		North Pacific	North	Central	Gulf	South Pacific
Diarrhea and enteritis.....	20.0	17.3	20.5	20.8	19.1	18.0
Pneumonia.....	15.0	9.4	11.8	20.0	5.5	5.8
Malaria.....	5.6	4.3	2.7	2.5	11.8	17.9
Violent and accidental.....	5.2	6.7	4.5	4.8	7.1	5.5
Whooping cough.....	2.9	1.0	2.4	2.9	2.3	4.6
Bronchitis.....	2.7	2.0	3.1	2.8	2.7	2.3
Liver diseases.....	2.7	1.6	1.6	3.8	2.0	1.2
Tuberculosis.....	2.5	6.0	4.2	1.6	3.6	1.3
Dysentery.....	2.3	1.4	1.1	1.9	3.6	4.6
All others.....	41.1	50.4	48.1	38.4	42.3	38.9
Total.....	100.0	100.0	100.0	100.0	100.0	100.0

* Data from Dirección General de Estadística.

The drinking of polluted water is a widespread cause of diarrhea. The absence of drinking water was discussed in chapter xii, where it was shown that 56.6 per cent of the inhabitants of Mexico live in houses where no drinking water is available. As a substitute, water from stagnant pools or polluted streams is used; and, unfortunately, the practice of boiling such water before drinking is practically unknown.

The lack of sanitation was also discussed in the chapter on housing, where it was pointed out that 86.5 per cent of the inhabitants of Mexico live in homes having no facilities for sewage disposal. Human and animal excrement strewn about the yards, the complete absence of screens, the abundance of flies in some regions, the absence of any

4. *El Universal*, June 26, 1931, quoted in Eyler N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, N.C., 1937), p. 274.

form of refrigeration, and the failure to realize the importance of washing the hands before eating all make for possibilities of food contamination and undoubtedly contribute to the widespread incidence of diarrhea.

PNEUMONIA

The second most important cause of death in Mexico is pneumonia, which is responsible for 15.0 per cent of all deaths. It is the second most important cause of death in every region except the Gulf and the south Pacific. In the central region it is practically as important a cause as diarrhea and enteritis. It takes fourth place, however, in the Gulf region, with only 5.5 per cent, and third place in the south Pacific, where it accounts for only 5.8 per cent of all deaths. The incidence of pneumonia, therefore, seems to be much more localized regionally than is true of diarrhea and enteritis. It is most prevalent in the central highlands and least prevalent in the coastal regions. Pneumonia is responsible for more than one-fifth of all deaths in the central region. It accounts for 25.2 per cent of deaths in the state of Hidalgo, 25.6 in the Distrito Federal, 28.6 in the state of Michoacán, 36.3 in Tlaxcala, and 36.7 in the state of México. Thus the toll taken by this disease, which is so nearly under control in some countries, is, in the central region, nothing short of astounding. It is responsible for one-fifth of the infant mortality of Mexico.

Among the factors responsible for the unusually high incidence of pneumonia, especially in the central region, are the following:

1. *Inadequate housing*.—This was discussed at length in chapter xii and need only be mentioned here. It was pointed out that 38.7 per cent of all dwellings in the central region are mere huts, according to the housing census of 1939. In the municipalities where there is no urban population, this proportion reaches 52.8 per cent. These structures are not designed to keep out the cold. They have no floors, and the walls and roofs contain cracks which permit the wind and rain to enter. This is very serious in an area where, in the winter months, it is not at all uncommon to have freezing weather and where, because of the altitude, the nights are usually chilly throughout the year.

2. *Lack of beds*.—Only 46.7 per cent of the inhabitants of the Central Mesa, living in communities with a population of less than 10,000, sleep in beds. The remainder sleep either on a straw mat thrown on the floor or ground or on a raised temporary platform of some sort. Frequently the only bedding used is the serape, which serves as a coat in the daytime.

3. *Lack of adequate clothing.*—As stated in chapter xiii this is probably more serious for women than for men.

MALARIA

The third most important listed cause of death is malaria, which is responsible for 5.6 per cent of all deaths. It is localized regionally in the Gulf states and in the south Pacific region. It ranks second among the principal causes of death in both these regions. In the Gulf states it accounts for 11.8 per cent of all deaths and in the south Pacific for 17.9. The highest incidence of death by malaria is found in the state of Tabasco, where it is responsible for 24.8 per cent of all deaths. This state, which is crossed by a number of rivers, is comparatively level and has an unusually heavy rainfall. At certain seasons the rivers overflow their banks, and stagnant ponds are formed. Many of these are scarcely dry when the overflow sets in again. Thus an almost ideal breeding ground for mosquitoes results. The other states in which malaria is particularly important as a cause of death are Oaxaca, where it accounts for 21.1 per cent of all deaths; Chiapas, where it amounts to 18.2 per cent; and Campeche, where it constitutes 16.6 per cent. Malaria also abounds in isolated sections of other states—more particularly in parts of Veracruz, Morelos, Guerrero, and Quintana Roo, as well as in other tropical or semitropical areas. The lack of screens on the houses and the failure to use mosquito netting when sleeping leave the inhabitants open to attack by mosquitoes. The long-term problem is definitely one of tremendous drainage projects.

Despite the high incidence of death by malaria in some of these southern coastal states, these, generally speaking, are not the states with the highest total death rates. The highest rates are found in the states of Guanajuato, Tlaxcala, and Puebla of the central region, where pneumonia and diarrhea are the principal causes.

VIOLENT AND ACCIDENTAL CAUSES

Deaths from violent and accidental causes constitute 5.2 per cent of all deaths in the Republic and are almost as important a cause of death as is malaria, which, as we have seen, is responsible for 5.6 per cent. The violent and accidental deaths do not fluctuate so greatly from one region to another as do deaths from other causes. The highest proportion of deaths from violence and accidents occurs in the Gulf states, where it accounts for 7.1 per cent of all deaths, and the lowest proportion is in the north region, where it is 4.5 per cent. The total number of accidental and violent deaths reported in the na-

tion in 1941 was 22,761. We do not know how many of these were due to accidents, but the homicide rate in Mexico is high. In 1940 the number of homicides per 10,000 inhabitants was 6.7 as compared with only 0.6 for the same year in the United States. We are inclined to believe that the difference between the two countries is even greater than these figures suggest because many homicides in Mexico either are not recorded at all or are listed under other causes. The author has been told of several concrete instances in which homicides were recorded on the books of local municipalities as having resulted from natural causes. Many homicides have resulted from quarrels over land rights and boundaries. In some isolated areas of the Republic local feuds and vendettas are still common. Many of the indigenous groups still prefer to settle their disputes in their own way instead of resorting to the law courts. Sometimes the punishment for what is generally regarded in the local community as a serious offense is spontaneous, swift, and fatal.

TUBERCULOSIS

According to official mortality records, deaths from tuberculosis amount to 2.5 per cent of all deaths. The proportion varies by regions from 1.3 per cent in the south Pacific to 6.0 in the north Pacific. In 1940 the number of deaths in Mexico from tuberculosis was recorded as 5.6 per 10,000 inhabitants as compared with 4.6 in the United States. Again we are inclined to believe that the data for Mexico are conservative, owing to the difficulty that the average peasant would have in recognizing the disease without medical diagnosis. Some of the deaths attributed to pneumonia, for example, might have been brought on largely through the weakened condition of the organism as a result of years of suffering from unrecognized tuberculosis.

CAUSES OF DEATH IN MEXICO AND THE UNITED STATES COMPARED

The number of deaths in 1940 attributed to the principal causes are given per 10,000 inhabitants for both Mexico and the United States in Table 70. It becomes obvious at a glance that the causes of death are very different in the two countries. In Mexico the number due to the combined influences of diarrhea and enteritis, pneumonia, malaria, and violent or accidental deaths reaches 106.6 per 10,000 inhabitants as compared with only 15.9 for the United States. In the latter country the causes taking the highest toll are diseases of the heart and cancer. Both of these are of comparatively little significance in Mexico. Cancer and heart disease together accounted for 41.4

deaths per 10,000 inhabitants in the United States in comparison with only 7.7 in Mexico.

Attention should be called to the probability that some of the differences noted between the two countries might be due in part to differences in the accuracy of diagnosis. The author feels that this is certainly true with respect to deaths from syphilis, for example. Some

TABLE 70
NUMBER OF DEATHS FROM SELECTED CAUSES IN 1940 PER
10,000 INHABITANTS: A COMPARISON OF MEXICO
AND THE UNITED STATES

CAUSE OF DEATH	DEATHS	
	Mexico*	United States†
All causes	228.2	107.6
Diarrhea, enteritis, etc.	48.0	1.0
Pneumonia (all forms)	31.8	5.5
Malaria	11.9	0.1
Violent and accidental	11.9	9.3
Suicide	0.1	1.4
Homicide	6.7	0.6
Motor-vehicle accidents	0.1	2.6
Other accidents	5.0	4.7
Tuberculosis (all forms)	5.6	4.6
Congenital malformations	5.6	1.0
Dysentery	5.4	0.2
Diseases of heart (all forms)	5.4	29.3
Whooping cough	4.1	0.2
Typhoid and paratyphoid fever	3.1	0.1
Influenza	2.5	1.5
Cirrhosis of the liver	2.5	0.9
Nephritis	2.4	8.2
Diseases of pregnancy, childbirth, and puerperium	2.3	0.7
Cancer	2.3	12.1
Intracranial lesions of vascular origin	1.9	9.1
Syphilis (all forms)	0.7	1.4

* Data from Dirección General de Estadística.

† Data from *Statistical Abstract of the United States* (1942).

of the villages in Mexico which the author visited were said by local physicians to have a very high incidence of syphilis; yet the scarcity of physicians in rural Mexico generally would almost preclude recognition of such diseases.

PRIMITIVE CONCEPTIONS OF DISEASE CAUSATION

The seriousness of the health problems, especially in the more isolated rural districts of Mexico, is due in no small part to the retarded

development of any scientific conception of disease causation. The benefits of modern medicine are confined largely to a small minority constituting the upper social and economic strata of the cities and to a few special groups, as will be noted later, who comprise but a small fraction of the total rural population. Many of the rural inhabitants are left to rely largely on the old folkloric remedies used by their forefathers and handed down from one generation to another by word of mouth, possibly from pre-Conquest times. These folkloric practices are woven about a central attitude, which, in itself, tends to preclude the development of a scientific conception of disease causation. This attitude is fatalistic in nature and assumes that disease and death are, to a large extent, the result of supernatural forces over which the individual himself has little or no control. Sometimes the affliction of an individual may be viewed as the work of angry spirits in retaliation for the failure of the victim to render proper respect to his deceased relatives; in other instances illness may be considered as punishment from the local saint or idol because of failure to render proper devotion; or sickness may even be attributed to outright maliciousness on the part of evil spirits, who seek to vent their wrath on the victim. The remedies in such cases may consist of activities designed to placate the offended spirits or to drive them or their influences from the body of the afflicted. Gamio reports that even in the vicinity of Mexico City one may still witness inhabitants holding magical ceremonies wherein a large doll is dressed in the clothes of the sick person and then beaten furiously with clubs for the purpose of driving out the malicious spirit from the body of the afflicted.⁵

The following explanations of the causes of disease were noted by Redfield and his collaborators in various communities selected for study on the Yucatán Peninsula. Most of these have also been noted by students in other parts of Mexico.

EVIL WINDS

Evil winds are often referred to as *aire* or as *los aires*. Concerning the role they play in sickness, Redfield says:

Of fundamental importance in the folk conceptions as to disease is the concept of evil winds. These are in part associated with actual movements of air, in part regarded as malevolent supernatural beings, and in part considered as groups of symptoms making up diseases. The concept exists both in generalized

5. Manuel Gamio, *Algunas consideraciones sobre la salubridad y la demografía en México* (Mexico City, 1939), p. 36.

form, "wind," and as many separately distinguished and often semi-personified "winds." They are connected with wells, caves, and water generally. The wind that blows in the evening when a yellow light shines against the background of a dark sky is a particularly dangerous wind; so also are whirling winds. Persons going into the bush are in special danger from these winds; so also are those who become heated from exercise, or who are tired, or who become sexually excited. The winds are thought of as somehow entering the body of the affected person, and treatment consists in removing them either by entreating them or by compelling them to go, as supernatural beings, or by removing them through lustrative actions, as if they were infecting substances. Specialists, curers or shaman-priests, are required in all serious ailments resulting from attack or possession by evil winds. Certain plants are especially appropriate to cure or to prevent the maladies caused by evil winds; the zipche plant is used to sweep away the winds; the seeds of the oxol are worn as a preventive.⁶

Parsons noted a similar tendency in the state of Oaxaca and elsewhere to attribute sickness to *aire*. She says:

... certain digestive ailments, rheumatism, headache, swollen glands, sores, "nerves," may be ascribed to evil eye and to other forms of witchcraft, to loss of the spirit through fright, and, above all, to "*aire*."

Among Nahuatl-speaking communities I have heard *aigre*, the air, winds, referred to as if it were an evil spirit of the air that takes possession of a person; the Zapotecan reference is to a somewhat naturalistic condition. . . . "Aire is like a wind. It makes a commotion in the body. It catches you suddenly, it enters the body." You may be overheated, you go outdoors, the "air" hits you, *aire se pega*. "From much thinking the head is heated, then the air hits. This air does harm."⁷

THE EVIL EYE

A second important cause ascribed to disease is that of the evil eye. Redfield describes this as follows:

A similar group of generally held beliefs and practices center around the idea of the evil eye. Certain persons are born with the power to cause sickness by merely looking at one; they may be recognized by the presence of some sort of a mark in their own eye or of a mark near the nose. Some animals have the power. Children are the usual victims of those with evil eye, and an ailment known as "green diarrhea" is the common result. Treatment is either with certain herbs, of which rue is most important, or by "homeopathic" application to the child of something associated with the one who, usually unwittingly, caused the sickness by exercise of his unfortunate power.⁸

"HOT" AND "COLD"

In Yucatán most articles of food and many herbs are regarded as possessing one of two opposite categories—"hot" and "cold." Good

6. Robert Redfield, *The Folk Culture of Yucatan* (Chicago, 1941), pp. 305, 306.

7. Elsie Clews Parsons, *Mitla—Town of the Souls* (Chicago, 1936), p. 118.

8. *Op. cit.*, p. 306.

health is looked upon as maintaining a proper balance between these two categories. When a person is warm or when he is in a weakened condition, he should avoid eating cold things. Much ill health is regarded as resulting from the eating of "hot" food or "cold" food at times when it should be avoided.

WITCHCRAFT AND BLACK MAGIC

The Redfields claim that probably one adult out of every ten in Dzitás, Yucatán, has been talked about as either a promoter or a victim of witchcraft.⁹ Belief in its existence has also been reported in numerous other communities. It is believed that witches may cause sickness by sending injurious objects into the body, sometimes through food, sometimes through insects or worms.¹⁰

In view of these primitive conceptions of the nature of disease, it is to be expected that the remedies prescribed would, in many instances, be equally primitive. The afflicted may try home remedies if his ailment is of the type with which he has had previous experience, but usually he consults the local *curandera*.¹¹ The techniques used by these *curanderas* are likely to consist of a variety of practices, including gazing into a crystal for the purpose of divination. Through this procedure it is often possible for the curer to present a convincing explanation of the cause of the malady and to give some indication of the chances for the patient's recovery. Sometimes the remedy may consist of bleeding and cupping. Massaging is often used, as is the practice of sucking the affected part in order to extract foreign substances when allegedly present. The use of herbs in various forms is widespread. Sometimes the herbs are boiled and taken internally in the form of tea; at other times they are mixed with other substances and used as ointments or poultices. Redfield reports that rue and prickly ash have widespread use as remedies in Yucatán: "Many people also use prickly ash by scraping a little of the wood into alcohol or rum or urine and rubbing the liquid on any afflicted part of the body."¹²

9. *Ibid.*, p. 330.

10. Robert and Margaret Park Redfield, *Disease and Its Treatment in Dzitas, Yucatan* ("Contributions to American Anthropology and History," Vol. VI, No. 32, Pub. 523 [Washington, D.C.: Carnegie Institution of Washington, 1940]), pp. 49-81.

11. A *curandera* is a woman curer or practitioner (*curandero*, a man) who treats sickness by means of herbs or by other medical or magical means. Often she is referred to as a "witch-doctor."

12. Redfield and Redfield, *op. cit.*, p. 71.

A few concrete illustrations will serve to indicate the nature of some of the remedies used. Parsons gives the following account of remedies used by local *curanderos* for cases involving the evil eye or witchcraft:

Urbano was treating an infant for *ojo* one day while I was visiting him. The baby was fat and healthy looking, but it had been vomiting and so was to be sucked for *ojo*. . . . He takes a mouthful of the *aguardiente* the mother brought him and spurts it over the child's right arm. With his finger he traces a cross on the arm and then, sucking gently, he passes his lips along the fat little arm, the right arm. Then the same for the left arm. He sucks both sides of the forehead, both sides of the neck, and then the chest. After washing his fingers in a gourd of water, he puts them down the child's throat, five or six times, bringing up a little saliva which he washes off.

On her own healthy grandchild Isidora gives me a demonstration of how she, too, sucks for the evil eye. It is much the same as Urbano's way. Before sucking, she massages the child with an infusion of leaves of the *árbol de Perú* and of rue, and then with table oil. From her mouth she spurts *aguardiente* on the child's arm and then, taking into her mouth more *aguardiente*, she passes her lips, sucking gently, along the arm. She spits out the *aguardiente* and taking another mouthful spurts again over the arm.

Isidora was sent for when Ligul's four months' old baby was sick. Sunday a woman had come to the house to sell oil. She took the baby in her arms and played with it. Monday the child began to vomit. "Perhaps it is *ojo*!" said the grandmother. "Perhaps that woman was a witch!" Isidora sucked arms, back and chest and gave the baby table oil and little tomatoes (*miltomates*). Tuesday the baby was sicker, and they sent for Agustina who sucked with *catalán* and gave the baby a drink of blueing. Wednesday the baby died. "*Es cierto*, for sure, that witch killed my baby!" concluded Ligul, as she sobbed out the story when she came to invite me to the wake.¹³

The following abstract of notes contained in a diary kept in the village of Chan Kom in 1930 by Alfonso Villa R and recorded by Redfield and Villa in *Chan Kom—a Maya Village* indicates a few of the explanations of sickness occurring in that village.

March 26, 1930: A child has the whooping-cough; the h-men [derived from the root *men*, "to know"] says it will die; it is God's will; it does die. May 9: Some children have whooping-cough; the mothers put out offerings to propitiate the supernatural beings supposed to bring the disease. June 17: The h-men gives herbal treatment in a case of dysentery. July 6 ff.: Don Fano, long sick, goes to Chichen Itza for medicines, and, when these do not bring relief, he summons the h-men. The h-men declares that Don Fano is being punished by the bee-gods, and the appropriate ceremony is held. July 18: A man moves his residence, because, finding his horse unaccountably dead, he concludes that evil winds are about. August 5: A girl has fever; the h-men says three winds have possessed her; he performs an exorcistic ceremony. August 11: A child with an intestinal

13. Parsons, *op. cit.*, pp. 135, 136.

infection is given no treatment. August 20: The death of an infant is ascribed to the effect of the supernatural bird that causes such deaths. October 10: The h-men performs a ceremony to exorcise evil winds from a sick man. November 14: Another infant dies; no explanation is reported. December 12: An epidemic of colds is somewhat speculatively ascribed by laymen to a recent shower of meteors. March 18, 1931: Another infant dies; the explanation as to the bird is given. March 23: A young girl has a sore on her side; the he-men is called; he performs a ceremony to exorcise the evil winds. April 29: Natives refuse to buy an electric machine offered by a traveling merchant to cure diseases. May 15: A woman has a cold; she goes to Chichen Itza for medicines. July 8: A man is sick; the h-men is called; he says the sickness was sent by the pagan gods because of the man's failure to make a ceremony; the ceremony is held. July 10: A boy is sick; the h-men says the sickness is caused by the spirit of his grandfather because the boy's father did not make the proper prayers. July 11: A girl, Ursena, is sick; a similar diagnosis is made. The prayers are held. July 21: A boy dies of dysentery; no treatment is reported. August 10: Ursena is still sick; the h-men says she has evil winds in her and prescribes a bath with rue. September 5 and October 14: The ease of the uay-chup, mentioned above. No sickness is involved. September 27: A man is sick; the h-men performs kex to drive out the evil winds.¹⁴

Reading the diary of Mr. Villa, one gets a vivid impression concerning the lack of ordinary precautions for preventing disease. On March 21, 1930, he wrote:

Whooping-cough has reached epidemic proportions among the children of this village. Instead of being in despair because of the coming of this sickness, the mothers of Chan Kom give it little importance, saying, "soon it will pass."¹⁵

On March 26, concerning the child who later dies with the whooping cough, Villa says:

So far as I can see, the child is not in a serious condition. However, the h-men says that it is going to die; the mother with indifferent resignation is waiting the end, the fatal climax; she does nothing to cure the child or to alleviate the sickness, and if it dies, it will be through neglect and not because it had to. It is ten o'clock at night and the little invalid apparently has not the least desire to die; but its least movement is enough to cause the women to surround it expecting each time the end. The father has finished making the coffin.¹⁶

Villa commented on the eagerness of the villagers to learn from persons in whom they had confidence. It appears that what they learn may be quickly forgotten, however, unless it is repeatedly emphasized over a long period of time.

14. Summarized in Redfield, *The Folk Culture of Yucatan*, pp. 328, 329.

15. Robert Redfield and Alfonso Villa R, *Chan Kom—a Maya Village* (Washington, D.C.: Carnegie Institution of Washington, 1934), p. 234.

16. *Ibid.*, p. 235.

It is interesting to observe the eager desire that these people have to rise out of their ignorance; if any visitor comes and if they suspect him of having any culture, they ask him to speak on any subject on which he may inform them. Last time that Dr. Shattuck was here he made a speech in English (translated by his interpreter into Maya) on the cause of diseases, saying that "they are not caused by evil winds, but by microorganisms known as microbes, that attack people in incalculable numbers, if they are not prevented, etc." He spoke with brilliant effect, and brought it about that for quite a time everybody in the village was sick, since there was hardly a person who did not feel inside him strange ticklings, caused, it appeared, by the "little ants" (for such was the mental comparison they made) which were consuming their vitals. This gave the h-mens much business in driving these noxious creatures out of their hosts by proper exorcisms. Actually, the microbe idea remains only in the minds of the two most sophisticated persons in the village: Don Nas, whom the microbes leave in peace only when he has received an injection of some sort of ampule which he buys in Valladolid, and Don Eus, who must go regularly to the h-men every Tuesday and Friday so as to have him, by means of his sorceries, annul the pathogenic results of the microbes, which after all, are no more than another form of "evil winds."

A similar disquietude was aroused when Dr. Sandgrouns spoke on vitamins. The tomato, previously so unappreciated, became for a few days an exquisite comestible. Perhaps now everything has returned to its normal state: the microbes have never existed and the vitamins are but the phantasies of the wise men.¹⁷

LACK OF PHYSICIANS IN RURAL AREAS

Rural Mexico is desperately in need of physicians. The scarcity of doctors makes it possible for a large proportion of them to practice in the large cities and to leave the rural areas to fend for themselves. Doctors find it uncomfortable to live in isolated rural villages, where, because of ignorance and superstition, the population does not fully appreciate the value of the services they are prepared to render and where none of the conveniences of modern living are available. What is perhaps equally important is the fact that doctors find it much easier to secure adequate remuneration for their services in the cities; hence those who wish to get ahead either professionally or financially tend to shy away from the rural areas and to establish their practice in the larger centers. In the rural areas of Mexico, which contain 64.9 per cent of the total population, were found only 8.7 per cent of the physicians practicing in 1940 (Table 71). In the rural areas of the central region were found only 4.1 per cent of the physicians of the region, even though 58.0 per cent of the region's population was located in these rural areas. The degree to which the rural population

17. *Ibid.*, p. 244.

is at a disadvantage in comparison with the urban population is illustrated by the fact that in the urban areas there is one physician for every 948 inhabitants, while in the rural areas there are 18,435 persons for each physician.

Dentists are concentrated in the cities to an even greater extent than are physicians. In the urban areas for the country as a whole there are 4,132 inhabitants per dentist, while in the rural areas there is only one dentist for every 140,137 inhabitants. In the rural areas are found only 5.2 per cent of the dentists, although 64.9 per cent of the population lives there (Table 72).

TABLE 71
NUMBER OF PHYSICIANS IN RURAL AND URBAN AREAS OF
MEXICO IN RELATION TO NUMBER OF INHABITANTS
BY REGIONS*

REGIONS	No. of Physicians			PERCENTAGE OF PHYSI- CIANS IN RURAL AREAS	PERCENTAGE OF INHABIT- ANTS IN RURAL AREAS
	Total	In Urban Areas	In Rural Areas		
North Pacific.....	372	246	126	33.9	70.9
North.....	1,188	1,048	140	11.8	64.6
Central.....	5,344	5,125	219	4.1	58.0
Gulf.....	726	604	122	16.8	68.3
South Pacific.....	334	249	85	25.4	83.8
Total.....	7,964	7,272	692	8.7	64.9

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

TABLE 72
NUMBER OF DENTISTS IN RURAL AND URBAN AREAS OF
MEXICO IN RELATION TO NUMBER OF INHABITANTS
BY REGIONS*

REGIONS	No. of Dentists			PERCENTAGE OF DEN- TISTS IN RURAL AREAS	PERCENTAGE OF INHABIT- ANTS IN RURAL AREAS
	Total	In Urban Areas	In Rural Areas		
North Pacific.....	72	59	13	18.1	70.9
North.....	153	147	6	3.9	64.6
Central.....	1,225	1,194	31	2.5	58.0
Gulf.....	219	196	23	10.5	68.3
South Pacific.....	91	73	18	19.8	83.8
Total.....	1,760	1,669	91	5.2	64.9

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

PLAN FOR TRAINING RURAL PHYSICIANS

In 1936 the School of Medicine of the National Autonomous University of Mexico, in co-operation with the federal Department of Public Health, devised a plan for extending medical services out into the small communities by means of graduate students, who, after having finished their course work in the Medical School, are sent into small communities for a period of five months immediately preceding the granting of the medical degree. The plan has a twofold purpose: (1) to decentralize the availability of medical service, which traditionally has been confined mostly to the larger centers of population, and (2) to provide prospective young physicians with first-hand contact and experience in meeting health problems in real-life situations before granting them the medical degree. In contributing toward a solution of the first objective, the student is sent into a community where there is no legally titled physician, and it is hoped not only that he will remain in this community during the five-month period of his contract but that during this time he will become so well established in the community that he will want to return to it after receiving his degree. In line with the second objective the student is expected to write a dissertation on the social, economic, and health problems of the community into which he is sent. This must be acceptable to an advisory committee from the Faculty of Medicine before he is permitted to take his final examination.

The procedure is as follows: Each year the Department of Public Health compiles a list of small towns under 5,000 inhabitants which have no physicians. This list is posted on a bulletin board at the School of Medicine, together with information concerning the number of inhabitants; systems of communication; presence or absence of post office, telephone, or telegraph; whether or not there is a pharmacy in the town; and the extent of aid, if any, which the town might be willing to give the prospective physician. Often such aid consists in providing him with a room in the town hall or elsewhere, which might be used as an office; sometimes he is offered a room or house in which to live; occasionally a small stipend is offered. From this list of towns with accompanying data, the student selects the community in which he wishes to serve, subject to the approval of the authorities of the Department of Public Health. Once the locality has been selected, the student receives detailed instructions concerning his duties, obligations, and methods of procedure. He also receives credentials authorizing him to practice medicine in the locality. Since the

community into which he will go has never been accustomed to paying for such medical service, it is anticipated that very little remuneration will be realized by him; therefore, the Department of Public Health and the Medical School jointly provide him with a wage of 90 pesos per month. In addition to this, he is permitted to charge a reasonable fee to persons definitely able to pay, provided that this charge be made for curative treatment only. In no case may he charge for preventive treatment, and he has definite instructions to distribute his efforts on the basis of need rather than on ability to pay.

The duties of this predegree physician are divided into four activities.

1. *Health education.*—He is expected to devote a good proportion of his time to activities encouraging practices conducive to sanitation and personal hygiene. To this end he is to arrange public and private conferences, to work through the teachers and the schools, and to devise ways and means of stimulating awareness of, and an interest in, health problems.

2. *Preventive medicine.*—He is expected to carry on a program of disease prevention by giving vaccinations and inoculations and instruction in measures that may be taken to avoid the spreading of contagious diseases. Vaccines and other materials are provided by the Department of Public Health. He must see that measures are taken to protect the community's drinking water against contamination.

3. *Curative medicine.*—He is expected to carry on the practice of curative medicine just as if he were a full-fledged practitioner. He is expected to write to the Faculty of Medicine of the university for advice concerning cases whose symptoms do not readily suggest proper treatment or whose ailments he is unable to diagnose. He is urged to send specimens for analysis to the central laboratory of the Medical School, where a committee of professors has been designated to answer his inquiries and to advise him on procedure in doubtful cases. He is expected to send a weekly report of all contagious diseases in the community to the Department of Public Health and also a detailed monthly report of all his work.

4. *Scientific investigation.*—He is expected to make a thorough investigation of the health conditions existing in the community and to outline a practical program for improving them. He is advised to work out this program in terms of the economic resources of the community and in terms of the limited help that might be expected from the state and federal governments, bearing in mind that there are

many other communities in the Republic in similar or worse condition.

At the end of the five-month period the student is called back to Mexico City, his credentials are withdrawn, and he is expected to finish the requirements for his degree. According to reports from the Department of Public Health, about 3,000 students undertook these assignments during the seven-year period 1936-43. Of this number, the vast majority have finished their degrees and about half of these have returned to set up a permanent practice in the communities in which they served. Other medical schools in Mexico have recently adopted this plan, and the number of rural physicians is increasing each year. Thus many small communities which formerly were completely deprived of medical attention have now obtained regular medical service.

Another interesting program for the training of physicians for rural areas is being carried on by the National Polytechnical Institute. This began in 1938, when a program of studies in rural medicine was organized. At first, there were only eleven students enrolled, and the curriculum was drawn largely from the biological sciences of the institute, including such subjects as physiology, embryology, and histology. Gradually this has expanded into what is now the Advanced School of Rural Medicine (*La Escuela Superior de Medicina Rural*), with a faculty of 86 professors (including part-time teachers) and more than 300 students. The program involves five and one-half years of study and is oriented toward rural conditions. In addition to the usual training in schools of medicine, students are expected to take courses in rural and Indian problems and in physical anthropology. It is expected that the graduates of the school, who will receive Doctor's degrees, will accept positions in rural communities, possibly in the government service. As of April, 1947, the school had turned out 15 doctors, and all were practicing in rural communities. Thirty-four others were expected to graduate by the end of the year. Plans were under way to enlarge the school facilities and to include a large and well-equipped hospital.

Since the school is supported from federal funds through the Secretariat of Public Education and since it is assumed that the government will employ most of the graduates, this means an important step in the direction of social medicine. The school has been severely criticized on this score by prominent physicians in Mexico City, some of whom have attempted to block the program. These critics have claimed that the admission requirements are below standard, that

the medical training is inadequate, that "pseudo-physicians" will be produced, that such a school will involve duplication of facilities found in the National Autonomous University of Mexico, and, finally, that the trend toward socialized medicine which the plan presupposes is undesirable.

Supporters of the school have answered repeatedly to the effect that the admission requirements are as high as those for other schools of medicine in Mexico; that the training in medicine is fully as thorough as that in the university; that, in addition, the students receive instruction in the social problems of rural Mexico, learn something about the environment in which they will be expected to work, and develop a feeling of social responsibility, especially toward rural society. It is asserted that poverty and ignorance are so widespread in rural Mexico and physicians so scarce that, unless rural medicine is sponsored and subsidized by the government, rural people will continue for generations to be deprived of the minimum essentials of health protection.

The program has not been in effect long enough, as yet, to evaluate adequately its results. It will be most interesting ten years from now to take an inventory of the proportion of the graduates who remain in rural areas after completing their training. This will probably be one of the crucial tests of the effectiveness of the program.

RURAL CO-OPERATIVE MEDICINE

Perhaps the most significant attempt to improve the health situation in rural Mexico at the present time is being made by the federal Department of Public Health in co-operation with the ejidatarios. This attempt had its beginning in 1936 with the organization of a division known as the Dirección General de Higiene Rural y Medicina Social ("Bureau of Rural Hygiene and Social Medicine"). This service is divided into three general types, each adapted to the economic conditions of the local area. The service is designed as a co-operative arrangement in which the ejidatarios are expected eventually to shoulder a fair share of the expenditures involved. With certain exceptions, the bureau has tended to shy away from communities that give little evidence of ability to share the responsibility for financial support. Unfortunately, as we shall see later, this inability probably applies to the majority of the villages in Mexico.

The most elementary type of service is that supported entirely by the bureau; it represents an initial attempt to establish the service in areas where it is expected that the co-operative plan can be devel-

oped subsequently. This type is also established in areas where economic conditions are such that there is little prospect of receiving financial co-operation from the local residents but where aid is badly needed and where, for reasons of public policy, it has been decreed that aid should be extended. This service usually consists of a physician, a midwife, a nurse, a pharmacist, and a sanitary officer, who are located in a central village and work out into the surrounding *pueblitos*. Ordinarily, their activities are confined to the geographical limits of a given municipality and often to the confines of a particular ejido. Their work consists largely of activities dealing with the prevention and control of contagious diseases through vaccinations, inoculations, and segregation. A certain amount of instruction is also given concerning elementary rules of sanitation. Emergency cases are treated, and medicines are dispensed to those whose need is obvious and urgent. Many of these units are located in areas inhabited largely by indigenous groups. The work of this unit resembles that of a charitable organization wherein only a few of its more critical cases are given attention and where an attempt is made to demonstrate a few of the more elementary rules of health.

The second type of service is somewhat more elaborate and is found in communities where the local inhabitants are able and willing to bear a fair share of the financial support either through allotments from the ejidos or through municipal or state allotments or by means of individual contributions. In these units there is a definite attempt to fit the service to the needs of the local community and to give the local inhabitants a voice in the planning and organization of the service. This type includes all that is found in the first type, plus the addition of a small infirmary with some provision for a maternity ward. It also has the services of several additional physicians who are considered as specialists in their respective fields. Greater attention is given to the individual needs of the local residents, and considerable work is done through the schools and other organizations. This unit is also confined to a local area usually comprising a few ejidos or, at most, a rural municipality.

The third type of service is much more elaborate and is confined largely to a few highly commercialized farming areas where the collective ejidos tend to prevail. This service consists of a centralized unit where there is a more or less well-equipped hospital and a number of specialized physicians, including a surgeon, a dentist, an obstetrician, and several general practitioners. In addition, there are a number of regional subunits, each consisting of at least a physician,

a nurse, and a pharmacist. As dependencies of the subunits there often exist a few first-aid stations where a nurse is on duty. These agencies are all co-ordinated into one organization having jurisdiction over a number of municipalities.

The service is generally financed jointly by the ejidos and the bureau, with each paying approximately half. The share raised by the ejidos is usually handled through the Ejido Bank and is charged against the ejido. It is paid back to the bank in the same manner as any other operating loan by deducting the amount from the gross profits of the enterprise before any dividends are declared. Thus only one transaction is required for the entire ejido. This saves the time and expense of trying to collect from each individual and is a painless way of extracting the sum from the ejidatarios; since they do not receive the fund in the first place, they are scarcely conscious that they are paying for their health service. The amount contributed to the health service by each ejidatario varies in different areas according to the amount of service available. Frequently it amounts to only 12 pesos per year, but in some areas it is 24, while in the Laguna region it is 48 pesos per year. This entitles all members of the ejidatario's family to whatever service is offered. In a few of the areas this includes unlimited consultations, prescriptions, treatments, medicines, dentistry, and even complex surgical operations. Obviously, such elaborate service is not widespread in rural Mexico;¹⁸ it is restricted to a few areas. This will become apparent as data are presented concerning the proportion of all ejidatarios receiving medical service and as the amount of expenditures are analyzed according to agencies.

The Bureau of Rural Hygiene and Social Medicine organized 34 agencies in 1936, and, of these, all but one was supported entirely by the bureau; the other one started as a co-operative enterprise with the ejidatarios themselves paying part of the expenses. The number of agencies increased each year until 1940, when 121 agencies were functioning, of which 97 were being supported entirely by the bureau and 24 were co-operatively supported. After 1940 the number of agencies declined until it stood at only 103 in 1942 (Table 73). In 1943 there were 109 agencies, with the bureau entirely supporting only 30, while 79 were being supported co-operatively. Although the number of agencies declined after 1940, the expenditures have increased nearly every year since the service was organized and reached 3,717,704.80 pesos in 1943. The proportionate share of the expense

18. For more detailed information as to the functioning of these units see chap. x.

paid by the ejidatarios has risen from 7.7 per cent in 1936 to 41.9 per cent in 1943, while the proportion paid by the bureau has declined from 97.1 per cent in 1936 to 27.5 per cent in 1943. The foregoing data would seem to suggest that there is a tendency gradually to restrict the service to those areas where the ejidatarios are able and willing to defray a substantial proportion of the expense involved. This hypothesis is confirmed by data indicating that in 1940 the service included a total of 302,406 ejidatarios, while in 1943 it included only 110,214. Furthermore, it should be pointed out that in 1943 the proportion of all ejidatarios in the Republic to which medical service was

TABLE 73

NUMBER OF HEALTH AGENCIES IN MEXICO SPONSORED BY THE DEPARTMENT OF RURAL HYGIENE AND SOCIAL MEDICINE AND EXTENT TO WHICH THEY ARE FEDERALLY OR CO-OPERATIVELY FINANCED, 1936-43*

YEAR	No. of AGENCIES			EXPENDITURES FOR HEALTH SERVICES		
	Total	Percentage Supported Entirely by Federal Funds	Percentage Supported Co-operatively	Total (Pesos)	Percentage Paid by Federal Government	Percentage Paid by Ejidatarios
1936.....	34	97.1	2.9	807,464.34	92.3	7.7
1937.....	75	98.7	1.3	1,495,360.49	85.4	14.6
1938.....	104	89.4	10.6	2,151,172.10	67.1	32.9
1939.....	109	81.4	18.3	2,597,939.10	60.4	39.6
1940.....	121	80.2	19.8	2,785,036.06	65.5	34.5
1941.....	112	68.8	31.2	3,001,450.56	61.8	38.2
1942.....	103	34.0	66.0	2,991,932.31	62.2	37.8
1943.....	109	27.5	72.5	3,717,704.80	58.1	41.9

* Adapted from Departamento de Salubridad Pública, *Memoria, 1942-1943* (Mexico City, 1943), p. 244, Tables 1 and 2.

available in any form through the above organization was only about 6.6 per cent.¹⁹ This leaves approximately 93.4 per cent without medical service.

The extent to which the available service is concentrated in selected areas is illustrated by Table 74, which indicates total expenditures according to agencies. Forty-five per cent of all available funds are allotted to the Laguna region. In this region a total of 21,846 ejidatarios are accommodated. They constitute only 19.8 per cent of all ejidatarios receiving medical service and only 1.3 per cent²⁰ of the total number of ejidatarios in the Republic. In other words, 1.3 per

19. Based on total number of ejidatarios in 1942.

20. Based on total number of ejidatarios in 1942.

cent of the ejidatarios are receiving 45 per cent of the funds expended for medical service. Further evidence that medical service is confined largely to a few of the highly commercialized farming areas rather than distributed throughout the country is strikingly revealed by summarizing the data in Table 74 for the following highly commercialized areas and comparing these with the total. The four areas of (1) the Laguna region, (2) the Yaqui Valley in

TABLE 74

TOTAL AMOUNT ALLOTTED FOR HEALTH SERVICES OF THE BUREAU OF RURAL HYGIENE AND SOCIAL MEDICINE IN 1943, BY AGENCIES*

AGENCY	TOTAL ALLOTMENT		AMOUNT CONTRIBUTED BY EJIDATARIOS		AMOUNT CONTRIBUTED BY THE BUREAU OF RURAL HYGIENE AND SOCIAL MEDICINE	
	Amount (Pesos)	Per Cent	Amount (Pesos)	Per Cent	Amount (Pesos)	Per Cent
Laguna region	1,072,621 16	44 09	599,099 09	51 41	473,521 16	49 57
Yaqui Valley	303,420 00	8 32	195,840 00	12 59	113,580 00	5 24
Mexicali Valley, Lower California	228,260 00	6 14	120,000 00	7 71	108,260 00	5 01
Merquital Valley, Hidalgo	200,000 00	5 38			200,000 00	9 25
Cacahoatán, Chiapas	130,452 00	3 51	69,972 00	4 59	60,480 00	2 89
Matamoros, Tamaulipas	120,075 00	3 23	62,075 00	3 25	58,000 00	3 15
Eldorado, Guasave, and Navolato, Sinaloa	91,800 00	2 47	46,800 00	2 61	45,000 00	2 09
Colonia "18 de Marzo," Tamaulipas	70,770 00	1 00	44,250 00	2 84	26,520 00	1 23
Nueva Italia, Michoacán	67,825 00	1 82	35,825 00	2 29	32,000 00	1 42
Irapuato, León, and Salvatierra	63,000 00	1 69	18,000 00	1 12	45,000 00	2 02
Guanajuato	45,592 00	1 23	17,592 00	1 15	28,000 00	1 20
Vidallería, Michoacán	42,980 00	1 10	22,050 00	1 42	20,930 00	0 97
Santa Ana, Sonora	40,000 00	1 08			40,000 00	1 65
Merida, Yucatán	40,000 00	1 08	20,000 00	1 25	20,000 00	0 92
San Pedro Río Mayo, Sonora	38,000 00	1 02	20,000 00	1 53	18,000 00	0 77
El Manadero, Lower California	32,000 00	0 80			32,000 00	1 42
Chalco, México	30,300 00	0 82	15,300 00	0 92	15,000 00	0 67
Cuatototolapam, Veracruz	25,600 00	0 69	10,500 00	0 67	15,000 00	0 67
Manzanillo, Colima	21,002 50	0 58	14,002 50	0 94	7,000 00	0 32
Colonia Anáhuac, Tamaulipas	20,000 00	0 54			20,000 00	0 92
Zacapu, Michoacán	18,000 00	0 48	18,000 00	1 12		
Arriaga, Concordia, and Ocoingo, Chiapas	6,705 00	0 18	6,705 00	0 42		
Buena Vista, Michoacán	402,027 14	10 83	17,522 74	1 12	384,504 40	17 22
All others						
Total	3,717,704 80	100 00	1,558,099 24	100 00	2,159,605 56	100 00

* Data from Dirección General de Higiene Rural y Medicina Social.

Sonora, (3) the Mexicali Valley in Baja California Norte, and (4) Cacahoatán in Chiapas account for only 26 per cent of the ejidatarios receiving medical service and only 1.7 per cent²¹ of all ejidatarios in the Republic; yet in these four areas is spent 63.9 per cent of all the funds devoted to medical service. The collective ejidos prevail in three of the four areas listed; only in the Mexicali Valley do the individual ejidos predominate.

Thus, while rapid strides have been taken with reference to health

21. Based on total number of ejidatarios in 1942.

programs in a number of restricted areas, the overwhelming majority of the ejidatarios are not included in the program.

Mexico is aware of the enormous health problems with which she is faced and is making serious efforts to do something about them. Perhaps the important point to stress is not that the services are concentrated in limited areas but that an important beginning has been made in these few which may be gradually extended to others. At the present time the federal government is engaged in a program of constructing local and regional hospitals. A plan was drawn up a few years ago for the construction of fifty-eight hospitals. Of these, twenty had been completed by July, 1946, and construction was proceeding on the others.

Significant contributions to the health program of Mexico have been made over a period of years by the International Health Division of the Rockefeller Foundation in co-operation with the Mexican government. This organization was first invited to Mexico in 1918 during an outbreak of yellow fever. Since that time it has worked continuously on various health projects, including treatment for hookworm, malaria control, and rural sanitation. Over the years since 1921 the Foundation has sent a total of sixty-six Mexican students as fellows to the United States to receive training in public health work. Sixty-three of these have returned to Mexico, and fifty of them are now employed in the Ministry of Health and Public Welfare or in related organizations. During the last few years interest has centered on personnel training, and to this end regional training stations have been organized which give instruction to employees of the Ministry of Health and Public Welfare in various parts of the country. This is in line with one of Mexico's greatest needs, which is trained persons distributed throughout the country who can teach and demonstrate the values of hygiene and sanitation.

Indianism in Relation to Standards of Living

FROM data which have been presented in previous chapters, the reader is probably prepared for the conclusion that a large proportion of the inhabitants of rural Mexico are living at about the same general cultural level at which they lived during much of the colonial period shortly after the Conquest. This will be referred to in the present chapter as the "Indian-colonial" level of living. The compound term is used because we are of the opinion that what is commonly regarded by middle- and upper-class Mexicans as "Indianism" or the "Indian way of life" is, in reality, a combination of aboriginal and Spanish-colonial cultural traits. Once this combination was achieved, it tended to persist with little change. Many of the ways of living that characterized the Indian masses during the colonial period have continued to prevail even up to the present time, almost entirely untouched by modern developments.

COMBINATION OF INDIAN AND SPANISH CULTURES

When the conquerors arrived, they endeavored to stamp out such elements of the Indian culture as were entirely inconsistent with, or antagonistic to, the Spanish culture of that period. Nevertheless, there were many elements of indigenous culture which were either neutral or fitted in well with the Spanish traditions, and these were left essentially undisturbed. Furthermore, there was a blending and fusing of the two cultures so that the result was a mixture and combination of the two. The food habits of the Indians were left more or less intact, and, as we have seen, the corn-beans-chile (and in the Central Mesa, pulque) complex still remains the basic food combination for the masses. Many of the culinary techniques and kitchen paraphernalia have also remained the same, with widespread reliance on such indigenous equipment as the metate for grinding corn,

the *comal* of clay for baking tortillas over an open fire, and the earthen pot for boiling beans. The Spaniards introduced domesticated animals, such as the burro, the horse, the mule, the hen, and the cow. They also introduced the wheel by means of which the ox-cart could be built, and they brought the ox along to pull it. The wooden plow was likewise a Spanish contribution, and with the help of the ox (both are widely used at the present time) it succeeded in modifying greatly the more primitive methods of agriculture. The Spaniards also introduced such foodstuffs as beef, pork, sugar, rice, chicken, eggs, milk, potatoes, wheat flour, chickpeas, citrus fruits, and spices;¹ but the use of these items by the rural population has always been either sporadic or restricted to specific areas—this is true, also, of certain indigenous products, such as tomatoes, honey, squash, and turkeys, which have persisted to the present time.

The Spaniards introduced new items of dress and altered somewhat the types of clothing, especially women's clothing. Tradition says that the clothing now worn by the Tarascan Indians, for example, was designed by Vasco de Quiroga. It is probable that most of the other elaborate costumes worn by Indian groups reflect the Spanish influence. Men's clothing has probably continued to conform more closely to aboriginal patterns. As we have already seen, the huarache is still widely used, and the serape is probably derived from an aboriginal prototype.² The calzones, shirt, and hat probably reflect Spanish influence and in many areas have remained practically unchanged since colonial times.

Rural houses reflect both Spanish and Indian influence. The interior arrangement of homes among the peasants probably differs little from that which existed among the aborigines. There is little or no furniture. Dirt floors are common, and beds are not widely used in the more rural areas. No provision is made for light or ventilation in the houses or for the smoke to escape. One room for the entire family is a common arrangement. Spanish influence is noted in the masonry of the adobe structures and in the grouping of buildings around a plaza in the larger villages and towns. The pre-Conquest rural houses were probably detached dwellings, separated by rows of maguey or by stone walls or trails. The Spaniards gathered the Indians into pueblos with houses adjoining one another on either side of a street. Dr. Gamio is of the opinion that this shift in the arrangement of houses was a step backward, since there is now more congestion, less

1. Robert Redfield, *Tepoztlán—a Mexican Village* (Chicago, 1930), p. 39.

2. *Ibid.*, p. 42.

air, and greater problems of sanitation than would be found if each dwelling were surrounded by space on a separate lot.²

As will be noted in chapter xix, religion reflects both Spanish and Indian influences even though the population is overwhelmingly Catholic in membership. In many cases the pagan attitudes and ceremonies have been merged with Christian beliefs and practices to such an extent that it is now difficult to distinguish between them.

Many of the attitudes concerning disease causation are still pre-colonial, as are a great many of the remedies prescribed to alleviate sickness.⁴ This is all reflected in the high death rates and in the high infant mortality rate in Mexico.

INDIAN VILLAGE MARKETS⁵

The trek to the village market starts very early in the morning. People begin arriving at daybreak. In the larger markets some arrive the previous evening and remain overnight. The transportation of goods to and from the market is largely by Indian-colonial methods, consisting of the human back and the backs of burros (see Pls. XVI and XVII). In some areas oxcarts are used, and in those few instances where highways now pass through the village some of the vendors may ride the local bus, with their wares tucked between the seats or strapped on top. Buses arriving on market day may appear to be carrying a heavier load of wares than of people.

Most of the goods brought into the rural-village markets are either homemade or locally grown. They represent almost all the goods and handicrafts produced in the region, including such articles as pottery, basketry, serapes, *rebozos*, huaraches, metates, cloth, straw mats, charcoal, livestock, feed for animals, and foodstuffs. In nearly every market will also be found a stock of imported goods from outside the region, brought in by itinerant merchants who travel from one market to another.

Villages sometimes specialize in a particular type of handicraft, and each acquires a local reputation for the superiority of its products. One village may specialize in a particular type of pottery, another in basketry, a third in weaving, and so on. At the market within a given region these wares can be sold or exchanged for other wares needed in the local community. In some of the rural markets a type of barter still persists. This has been noted particularly by Malinowski and De la Fuente in the state of Oaxaca.⁶ They observed that in the village of Atzompa nearly all the market transactions were by means of barter. Frequently, when barter does occur, use is made of money values as a means of arriving at the transaction. A person wishing to exchange a piece of pottery for some fruit may set a money value on his pottery; the vendor of the fruit desiring the pottery will then sort out the amount of fruit which he thinks is worth the stipulated value of the pottery. Bargaining may then take place until both parties are satisfied with these asserted values. The exchange of articles may subsequently take place.⁷

Within a given region village markets are scheduled on alternate days. Market day may take place on Wednesday in one village, on

6. Bronislaw Malinowski and Julio de la Fuente, "The Economics of a Mexican Market System" (manuscript for a forthcoming book). The author gratefully acknowledges indebtedness to the authors for permission to read this manuscript.

7. *Ibid.*

Friday in another, and on Sunday in a third. This system makes possible a wider exchange of local goods among the general population, since different markets can be attended on different days. It is especially convenient for itinerant merchants, who attend all the major markets in a given area and who visit the larger cities between times to replenish their stock of goods. The larger towns hold markets on several days of the week, and in many of the cities markets are held every day.

The particular day of the week on which a given village market takes place has probably been so designated since colonial times, if not since the pre-Columbian period. It is so strongly imbedded in the customs of the people that it takes place with clocklike regularity in almost automatic fashion. A drowsy village that has been quiet and drab all week long is suddenly transformed on market day into the resemblance of a colorful, authentic pageant. Inhabitants from all the surrounding villages and hamlets stream into the community, wearing their native costumes and bringing their wares to display.

Malinowski and De la Fuente conclude that the function of the village market is primarily economic.⁸ It serves as an exchange mechanism through which prospective producers and consumers may come together and exchange products. It appears to be adapted to the needs of low-income groups who do not have resources with which to purchase more than about one week's supply of goods at a time.⁹ It reduces the functions of the middleman to a minimum, since producers may come into direct contact with prospective consumers in the market place and can bargain with them face to face. It brings together at least once each week a fairly large supply of a wide variety of articles from which the consumer may choose. This supply and variety are much greater than the merchants of the average community could afford to retain on sale continuously in stores and shops. Thus the market seems to be performing an important economic function.¹⁰

In addition to the economic functions, however, the markets perform important social and recreational functions as well. In the market place, acquaintances are made with people from other villages. Women leave their dark and drab jacales and spend the day with the crowd. Men experience a break in the daily routine of affairs in the fields or the shops and receive a great deal of relaxation and diversion by mingling with their fellows in the market. Stories are often told of Indians on their way to market refusing to dispose of their entire supply of wares at one time, except for a higher price than they would

8. *Ibid.*

9. *Ibid.*

10. *Ibid.*

realize by selling it article by article, because the disposal of all the goods at one time would deprive them of the excuse for spending the day in the market. Even the process of buying and selling takes on certain aspects of a bargaining game, since ordinarily nobody expects, or is expected, to pay the original price asked for any given article. In some cases activities are directly oriented toward recreation. Small groups may gather around one or more guitar players who strum and sing some of the more recent *corridos* (popular songs). Also, groups of men may be seen playing gambling games of one kind or another.

The village-market complex follows fairly closely the regions in which the indigenous groups tend to be most numerous. As one goes northward, for example, the market pattern begins to fade out by the time one reaches the city of Aguascalientes. In the north and the north Pacific regions, or north of an imaginary line drawn from the city of Tampico on the Gulf Coast and running through Aguascalientes and to the Pacific Coast, the system of markets as herein described is rarely found. If one inquires about "market day" in the northern states, he is looked upon with bewilderment, since the people do not understand what is meant. In the central region and the south Pacific, where the Indian-colonial culture tends to predominate, market day plays a very important part in the lives of the inhabitants. It appears to be a survival from pre-Columbian times, modified and adapted to existing needs.

INDEX OF CONTEMPORARY INDIAN-COLONIAL CULTURE

The succeeding pages represent an attempt on the part of the author to work out an index of Indian-colonial culture that will indicate approximately the areas of Mexico wherein the attitudes and customs of the people still resemble those of the Indian-colonial period, and to estimate the proportion of Mexico's inhabitants who live essentially according to the Indian-colonial pattern.

Fortunately, the population census of 1940 contains a section giving certain data on "cultural characteristics" for all the inhabitants of Mexico, and from this it seems possible to devise an index which may indicate approximately the proportion of the population involved. The component elements of this index must, of necessity, be restricted to available data, and it is frankly admitted that other items not here included might be of equal or greater importance if information concerning them were available for the same individuals. The results, therefore, are to be regarded as purely tentative and subject to subsequent verification.

Those persons are considered as living essentially at the Indian-colonial cultural level who fall into any of the following three broad groupings:

1. Those who speak only Indian languages
2. Those who speak Indian languages and also Spanish, but who
 - a) Go barefoot, or
 - b) Wear huaraches, or
 - c) Wear shoes but who also wear Indian-type dress
3. Those who speak only Spanish or other non-Indian languages, but who
 - a) Go barefoot, or
 - b) Wear huaraches only, or
 - c) Wear shoes but also wear Indian-type dress.

Briefly commenting on each of these groups, there would appear to be little question concerning the advisability of including item 1 in the index, since this group is obviously composed of Indians who are unassimilated into the national life and who live by custom and tradition just as their ancestors have done for ages.

There also appears to be little question concerning persons who speak Indian languages but who also speak Spanish. Most investigators do not hesitate to label this entire group as Indian. From the index, however, we have excluded those of this group who wear shoes and modern dress, since it is obvious that, whether or not they are Indian racially, they have become assimilated into modern culture. Some of these latter are Indians who have become educated but who still remember their native Indian language.

The third division of the index includes the large group of Indians and mestizos who have lost their Indian language but who probably live on about the same plane as those who have retained the language. From this group, who speak only non-Indian languages, are excluded all those who wear shoes and modern dress. All others are included. Of the latter group, there would seem to be little room for questioning the advisability of including those who go barefoot. Likewise, there could be little error involved in including the relatively small group who are reported to wear shoes but whose dress otherwise is typically Indian. This group makes up such a small proportion of the total that excluding them would not greatly affect the results. There remains only (*b*) of group 3. In this category are found a total of 3,820,406 persons who speak only Spanish, or other non-Indian languages, but who wear huaraches. Of these, 1,051,274 individuals, or 10.5 per cent, also wear Indian-type dress in addition to huaraches and therefore may be included without hesitation.

This leaves only those who do not speak an Indian language or wear Indian-type dress, but who do wear huaraches. They probably constitute a transition group who are beginning to slough off some of the earmarks of Indianism. Nevertheless, the author's experience and observations lead him to believe strongly that their level of living on the whole is little different from that of the aforementioned groups. When the Mexican Indian begins to become assimilated into modern culture, he first gets rid of his language, or at any rate learns Spanish. He then tries to displace some of the more obvious personal symbols of Indianism, such as the calzons and the huaraches. Both of these are generally regarded in Mexico as earmarks of Indianism, and it is likely that they will be exchanged for trousers and shoes long before much attention is given to such other cultural changes as placing a floor in the home, providing the home with windows and a chimney, boiling the drinking water, and adopting sanitary precautions against diseases. Many of these latter aspects of modern culture lag far behind the wearing of shoes; therefore there appears to be considerable justification for placing the wearers of huaraches in with the other groups living at the Indian-colonial level.

The number and percentage of individuals involved in each of the component parts of the index are shown in Table 75. They are distributed as follows:

1. Persons speaking only Indian languages constitute 14.8 per cent of the population having the characteristics included in the index and 7.6 per cent of the total population of the Republic.

2. Persons speaking Indian languages and also Spanish, but who (*a*) go barefoot, (*b*) wear huaraches, or (*c*) wear shoes but Indian-type dress, make up 12.9 per cent of the population with characteristics specified in the index and 6.6 per cent of the total population.

3. Persons speaking only Spanish or other non-Indian languages, but who (*a*) go barefoot, (*b*) wear huaraches, or (*c*) wear shoes but Indian-type dress, constitute 72.3 per cent of the population with characteristics specified in the index and 37.0 per cent of the total population.

Thus the total number of inhabitants, who, according to the index, are living at the Indian-colonial level, adds up to 10,054,018 individuals, which is equivalent to 51.2 per cent of the total population of the Republic. This is almost exactly the percentage classified by the census of 1940 as being illiterate (51.6 per cent). As will be shown later, there is a high correlation between the two.

The vast majority of the inhabitants living at the Indian-colonial

TABLE 75

POPULATION OF MEXICO LIVING AT THE INDIAN-COLONIAL LEVEL, BY SIZE OF COMMUNITY*

GROUPS OF CULTURAL CHARACTERISTICS COMPRISING INDEX OF "INDIAN- COLONIAL" LEVEL OF LIVING	Total Mexico			Living in Localities of over 10,000 INHABITANTS			Living in Localities of 10,000 or Less INHABITANTS		
	No. of Persons	Percentage of Total 1, 2, and 3 Population	Percentage of Total Population	No. of Persons	Percentage of Total 1, 2, and 3 Population	Percentage of Total Population	No. of Persons	Percentage of Total 1, 2, and 3 Population	Percentage of Total Population
1. Speak only Indian languages.....	1,486,717	14.8	7.6	8,851	2.5	0.2	1,477,866	15.2	9.6
2. Speak Indian language and Span- ish, but									
a) Go barefoot.....	753,284	7.5	3.8	10,864	3.0	0.3	742,420	7.7	4.8
b) Wear huaraches.....	492,759	4.9	2.5	5,780	1.6	0.1	486,979	5.0	3.2
c) Wear shoes but Indian-type dress	53,338	0.5	0.3	2,997	0.8	0.1	50,341	0.5	0.3
Total a, b, and c.....	1,299,381	12.9	6.6	19,641	5.5	0.5	1,279,740	13.2	8.3
3. Speak only Spanish or non-Indian language, but									
a) Go barefoot.....	3,364,776	33.5	17.1	177,099	49.6	4.1	3,187,677	32.9	20.8
b) Wear huaraches, and									
(1) Indian-type dress.....	1,051,274	10.5	5.3	21,615	6.1	0.5	1,029,659	10.6	6.7
(2) non-Indian-type dress.....	2,769,132	27.5	14.1	123,486	34.6	2.9	2,645,646	27.3	17.2
Total b.....	3,820,406	38.0	19.4	145,131	40.6	3.4	3,675,275	37.9	24.0
c) Wear shoes but Indian-type dress	82,738	0.8	0.4	6,471	1.8	0.2	76,267	0.8	0.5
Total a, b, and c.....	7,267,920	72.3	37.0	328,701	92.0	7.6	6,939,219	71.6	45.2
Population living at "Indian-colonial" level (Total 1, 2, and 3).....	10,054,018	100.0	51.2	357,193	100.0	8.3	9,696,825	100.0	63.2
Total population.....	19,653,552	.....	100.0	4,308,240	.....	100.0	15,345,312	.....	100.0

* Special tabulation of data on cultural characteristics from *Sexto censo de población (1930)* (Dirección General de Estadística).

TABLE 76

PROPORTION OF THE TOTAL POPULATION LIVING AT THE INDIAN-COLONIAL LEVEL
BY SIZE OF COMMUNITY AND BY REGIONS AND STATES*

REGION AND STATE	TOTAL		LIVING IN LOCALITIES OF OVER 10,000 INHABITANTS		LIVING IN LOCALITIES OF 10,000 OR LESS INHABITANTS	
	No. of Persons	Percent- age of Total Popula- tion	No. of Persons	Percent- age of Total Popula- tion	No. of Persons	Percent- age of Total Popula- tion
North Pacific	378,837	31 5	13,488	6 5	365,349	36 7
Baja California N.	684	0 9	130	0 4	554	1 3
Baja California S.	11,678	22 7	1,660	16 0	10,018	24 4
Nayarit	131,423	60 6	5,911	21 2	125,512	66 5
Sinaloa	197,416	40 1	4,385	6 5	193,031	45 3
Sonora	37,636	10 3	1,402	2 1	36,234	12 2
North	1,029,175	26 4	28,367	3 1	1,000,808	33 5
Coahuila	59,246	10 8	6,469	3 3	52,777	15 0
Chihuahua	99,952	16 0	3,341	2 2	96,611	20 6
Durango	164,205	33 9	3,660	6 2	160,545	37 8
Nuevo León	66,773	12 3	1,722	0 9	65,051	18 3
San Luis Potosí	359,182	52 9	6,954	7 4	352,228	60 2
Tamaulipas	59,462	13 0	2,799	1 6	56,663	19 9
Zacatecas	220,355	39 0	3,422	7 4	216,933	41 8
Central	4,817,911	51 1	207,359	7 8	4,610,552	68 0
Aguascalientes	40,002	24 7	5,322	6 5	34,680	43 6
Distrito Federal	151,801	8 6	61,899	4 0	89,902	44 2
Guanajuato	506,753	48 4	35,457	15 3	471,296	57 8
Hidalgo	574,744	74 5	6,244	7 9	568,500	82
Jalisco	645,334	45 5	42,881	13 1	602,453	55
México	839,316	73 2	3,422	7 9	835,894	75
Michoacán	588,026	49 7	13,481	11 8	574,545	53
Morelos	110,584	60 5	1,389	9 7	109,195	64
Puebla	1,004,351	77 6	30,713	17 9	73,638	86
Querétaro	190,691	77 9	6,551	19 5	184,140	87
Tlaxcala	166,309	74 2			166,309	74
Gulf	1,482,050	60 9	61,339	14 8	1,420,711	71
Campeche	46,461	51 4	4,329	18 6	42,132	6
Quintana Roo	7,050	37 6			7,050	2
Tabasco	234,636	82 1	7,949	31 7	226,687	8
Veracruz	929,046	57 4	32,564	12 8	896,482	
Yucatán	264,857	63 3	16,497	14 9	248,360	
South Pacific	2,346,045	87 4	46,640	38 2	2,299,405	
Colima	44,312	56 2	5,191	23 0	39,121	
Chiapas	574,671	84 5	13,918	32 5	560,753	
Guerrero	615,633	84 0	3,928	30 8	611,705	
Oaxaca	1,111,429	93 2	23,603	53 8	1,087,826	
Total	10,054,018	51 2	357,193	8 3	9,696,825	

* Special tabulation of data on cultural characteristics from Sexto censo de población (1940) (Dirección de Estadística)

level are to be found in the more rural districts (Table 76). For all cities having more than 10,000 inhabitants, the percentage is only 8.3, while for all localities with less than 10,000 inhabitants the percentage living at the Indian-colonial level is 63.2. Regional differences are also apparent for both rural and urban areas. In each case the proportion living at the Indian-colonial level increases as one goes southward. There is also wide variation among the various states.

Regional and local variations in the proportion of the population living at the Indian-colonial level can best be comprehended from

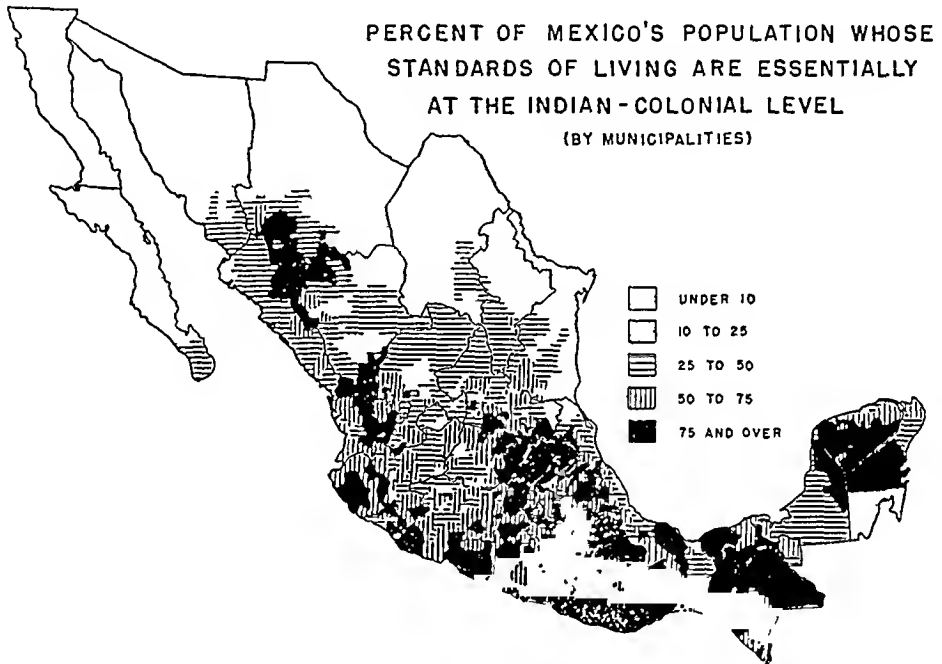


FIG. 30.—Percentage of Mexico's total population living at the Indian-colonial level as determined by the index in Table 75, by states.

examination of Figure 30, which shows the relative proportion of the population involved for each municipality in the Republic. The following observations seem to be apparent from this map:

1. The municipalities with the lowest proportion of the population living at the Indian-colonial level are found in those northern states which border the United States.

2. Within those states bordering the United States the lowest percentage is found in those municipalities nearest the frontier. With but few exceptions, the municipalities situated in the northern portions of these border states are about the only areas in the Republic where the proportion living at the Indian-colonial level is less than 10 per cent of the population.

3. With but few exceptions, the proportion of the population living at the Indian-colonial level gradually increases as one goes southward, until it reaches its greatest proportion in the south Pacific area. In the state of Oaxaca the proportion living at the Indian-colonial level is 75 per cent or more, for 29 out of a total of 30 districts. In Chiapas, 101 municipalities out of a total of 109 show 75 per cent or more of the total population living at this level; and in the state of Guerrero, 58 municipalities out of a total of 71 show 75 per cent or more of the total inhabitants living at the Indian-colonial level.

4. Except for restricted areas of the northern states, all the municipalities in which 75 per cent or more of the total population live at the Indian-colonial level are found south of an imaginary line which may be drawn from the city of Tampico westward to the Pacific Coast, passing through the city of Aguascalientes.

5. The isolated pockets in the more northern areas where Indian-colonial culture prevails are to be found chiefly among these Indian groups: (*a*) the Tarahumaras of southwestern Chihuahua and northwestern Durango; (*b*) the Tepehuanes of southern Durango and northeastern Nayarit; (*c*) the Coras and the Huicholes of eastern Nayarit and northern Jalisco.

6. Generally speaking, within a given state those municipalities containing urban clusters tend to have a lower percentage of population living at the Indian-colonial level than do those containing no urban concentrations. Thus the district in which the city of Oaxaca is located is the only district in that state where less than 75 per cent are living at the Indian-colonial level; in the state of Chiapas there are 8 municipalities, out of a total of 109, in which less than 75 per cent of the population live at the Indian-colonial level, and these 8 include the 5 municipalities containing the 5 largest towns in the state. This rural-urban relationship does not necessarily hold among regions, however. The proportion living at the Indian-colonial level in the city of Oaxaca is much greater than that found even in most of the rural areas of northern Chihuahua. In other words, regional differences tend to outweigh rural-urban differences. The reader will observe that, for the most part, the states showing the greatest proportion of persons living at the Indian-colonial level according to this index are also the states in which the highest proportion live in huts (Fig. 24), eat corn instead of wheat (Table 61), do not sleep in beds or cots (Table 54), use the wooden plow (Table 40), and contain the highest proportions of illiteracy (Table 84). The map shows a striking resemblance to Figure 35, wherein illiteracy is plotted ac-

according to municipalities.¹¹ The high positive correlation between the percentage of the total population living at the Indian-colonial level and the percentage of the total population 10 years of age and over that is illiterate (i.e., can neither read nor write) is probably one of the most conclusive evidences that the index of Indian-colonial culture is reliable. When the maps on Indianism (Fig. 30) and illiteracy (Fig. 35) are examined together, it is difficult to distinguish one from the other. The lighter as well as the darker shades on the maps tend to coincide. This simply means that in those municipalities in which a small proportion of the population is living at the Indian-colonial level and where, in other words, the more modern culture tends to prevail, there is also found a comparatively low rate of illiteracy. In municipalities in which a large proportion of the inhabitants are living at the Indian-colonial level, the percentage of the population that is illiterate is usually high also.

The illiteracy map, like the map on Indianism, shows a much smaller proportion of illiterates in the northern border states, with the proportion gradually increasing as we go southward, except for isolated pockets where illiteracy is high and which on the Indianism map are shown to have a high proportion of population living at the Indian-colonial level.¹² Generally speaking, on both maps the more darkly shaded areas tend to be found south of the city of Aguascalientes.

In order to measure the degree of relationship between Indianism and illiteracy, the correlation between the proportion of the inhabitants of each municipality living at the Indian-colonial level and the proportion illiterate was computed. The coefficient of linear correlation was found to be $+ .76$.¹³

The relationship between illiteracy and the Indian-colonial index would appear to be a logical one. Where illiteracy is very high, the inhabitants must depend almost entirely on word of mouth to pass along the cultural heritage. This limits the available source of information concerning ways of living to a very narrow circle of relatives,

11. See Fig. 35 in chap. xvii.

12. These areas include such groups as the Tarahumaras of southwestern Chihuahua and northwestern Durango and the Coras and the Huicholes of eastern Nayarit and northwestern Jalisco.

13. The number of pairs of observations used in the computation was 1,738. The equation of the curve describing the relationship between these two variables is $Y_c = 26.6843 + 0.5036X$. The scatter, or standard error of estimate, is 13.08. According to accepted standards of statistical procedure, this is a significant relationship.

neighbors, and fellow-villagers. This is especially true in a land such as Mexico, where the majority of the inhabitants live in small villages that are isolated geographically and culturally from the rest of the world through lack of railroads, highways, telephones, radios, and other communication facilities. As will be shown in the chapter on education, in many of these villages not more than a half-dozen people know how to read with any degree of fluency, and often there is little or nothing available for those who can read. Thus the most natural thing in the world is for children to learn only what their parents know, or think they know, and to do things in about the same way, using the same old techniques and devices and securing approximately the same results. Each individual lives and thinks as his neighbor does because usually there is intimate and prolonged association among members of the local village, although this stops abruptly at the mountain walls.¹⁴ Local villagers are seldom confronted with the idea that other ways might be more efficient than their own, partly because they never read books and partly because they are unlikely to have intimate contacts with anyone who has ever experienced the advantages of doing things differently. Children grow up accustomed to sleeping on the ground, to consulting the witch doctor in case of sickness, to drinking polluted water. They continue just as their parents did to feed the baby on tortillas and beans, to use the yard as a latrine, and to plant corn on land whose soil has been depleted and would be much better suited to other crops.

The problem of raising the standards of living above the Indian-colonial level is complex and many sided. It involves not only increasing the income of the masses of the peasants but also comprehensive educational programs of a demonstrational nature that would reach out into the homes and onto the farms to demonstrate the more efficient techniques of living and farming. Without an increase in income, there are undoubtedly definite limitations to the amount by which the living standards could be raised. Families whose total income does not exceed 1.50 pesos per day, for example, cannot be expected to withdraw their patronage from the local *curandera*, who charges them only 50 centavos for a visit in case of sickness, and to patronize, instead, a modern physician who is likely to charge them 5 or 10 pesos for a visit. Nor with their present incomes can they be expected to purchase any great amount of farm machinery or house-

14. Robert Redfield, "Folkways and City Ways," in Hubert Herring and Herbert Weinstock (eds.), *Renascent Mexico* (New York, 1935), pp. 37, 38.

hold equipment. The raising of incomes very far above present levels involves many problems which are difficult for the individual to solve by himself. Such problems involve the development of a great many small irrigation projects which would make possible an extension of the crop season and the insuring of a reasonable harvest.

Another very serious problem in raising incomes throughout large areas of rural Mexico is that of transportation facilities that would place farmers in reach of markets for their products. As mentioned earlier, the federal government has made notable progress in extending trunk-line highways connecting some of the larger towns and cities in recent years; but there is a serious lack of roads feeding into these few trunk lines from the surrounding regions through which they pass. A large proportion of the inhabitants of rural Mexico still live one or more days' travel by muleback from the nearest connecting highway or railway station. This makes both the marketing of farm products and the purchase of supplies and equipment very expensive.

In these areas local production is largely confined to those goods of a subsistence nature which can be exchanged or sold in the local village markets. Any such costly projects as highway construction or irrigation development in these isolated regions will probably have to wait until federal or state governments decide to undertake them, since their cost would be prohibitive for the peasants with their present level of income.

THE PROBLEM OF CHANGING THE SOCIAL AND CULTURAL VALUES

The problems facing the statesman and the educator in Mexico who would seek to extend the community of interests beyond the local village and who would seek to weld the thousands of isolated groups into a nation are twofold. First, they must decide what aspects of the folk culture should be preserved and what parts should be changed. This alone is a gigantic problem, but the second is equally important. It involves the selecting of techniques and procedures that will produce the desired changes without destroying or throwing out of balance the elements that are considered to be worth while.

The Mexican government has already taken steps to preserve some of the Indian arts and regional dances. Each year a program of native regional dances is given in the national stadium by school children in costume. This is sponsored by the Secretariat of Public Education and is worth anyone's time to attend.

We have already noted that the Indian village market is an excellent adaptation to conditions under which transportation and communication with the larger world are lacking. This local marketing system might well be studied with the view of facilitating its more efficient functioning in the interest of the peasants and small craftsmen. An adequate educational program would study carefully all aspects of the Indian-colonial culture with the idea of singling out for perpetuation those which offer a positive contribution to rural welfare.

Changes in the social and cultural values should be introduced very cautiously and probably should begin with those practices that have affected adversely the welfare of the people, such as lack of sanitation, inadequate housing, and inefficient agricultural techniques.

Many of those living at the Indian-colonial level do so because they have never experienced the values of any other way of living and hence do not have aspirations for change to anything different. Sanitation, modern housing, and education, for instance, rank low in their scale of values because they have had no experience that would tend to make such things seem important. The task of raising the standards of living is, first of all, the task of making such things as are deemed essential to a higher level of living seem important to the people, so that they will make some sacrifice to achieve them. This is primarily an educational problem. Economic income, to be sure, places limits on the amounts of goods and services that can be obtained, but much could be accomplished even with existing incomes.

While peasants cannot pay 5 or 10 pesos in order to consult a physician whenever illness occurs in the family, they could be taught to prevent a great amount of sickness by observing a few elementary rules of health. It would cost them practically nothing, for example, to boil their drinking water. There need be no expense involved in digging a hole at some distance from the house to serve as a latrine. At little or no expense the animals could be fenced off from the dwelling and the breeding grounds of flies thus removed farther from the house. When a dwelling is being constructed, little additional expense would be involved in arranging for windows or spaces through which light and air might circulate or in providing for flues or vents through which smoke could escape out of the room. The ejidatarios and their families might be taught to use some of their leisure time in games and sports and in activities for the improvement of community life and to curtail their use of intoxicating beverages. Even the

productivity of the land might be considerably increased at little additional capital expense if only the peasants could be taught the principles of crop rotation, the use of available fertilizers, including the preparation and use of compost, and a few elementary techniques of soil conservation.

A tremendous and far-reaching educational program is nevertheless necessary in order to bring about these apparently simple changes. The coating of custom is thick and tough where groups have been isolated for ages from participation in the fruits of modern scientific developments. Not being acquainted with any other way of life, people are reluctant to discard the old for fear the new will prove to be less adequate in the long run. Therefore, he who would change their old ways must not only teach them the new but must *demonstrate* to them the superiority of the new. Rural school-teachers in Mexico have found, to their sorrow, that young children who are taught new ideas and habits in the elementary school soon have these brushed off when they return to rub shoulders with adults in homes in which such ideas encounter vigorous and continuous resistance. This disheartening experience has led some Mexican educators to question seriously the effectiveness of any educational program which does not lay considerable stress on adult and community education. Unless the scale of social values in the community is revised so that a high evaluation will be placed on the activities, attitudes, and techniques which children learn in school, it is unlikely that the mere establishing of more schools will do much to change the ways of living. To become really effective, the school program must be accompanied by an adult educational program that will provide an environment in the community favorable to fostering and nourishing the culture which the school strives to foster and to promote.

Fortunately, certain Mexican educators are conscious of all these problems and have made an important beginning in organizing a program of education on a community-wide basis. The rural cultural missions represent such an attempt and will be discussed in chapter xviii.

PART IV

Social Institutions

CHAPTER XVI

Marriage and the Family

IN RURAL Mexico the elementary family—parents and their offspring—tends to be characteristic, although frequently this is modified to include three generations. The latter circumstance arises out of the tendency for newlyweds to live for a time at the home of the bridegroom's parents, pending the construction of a home for themselves, and for a widow and her children to return to the hearth of her parents at the death of her husband.¹ The elementary family is modified, also, when parents become too old to care for themselves and they either persuade one of their married sons to remain at the parental home or abandon their homesite to live with one of their married children. Sometimes married sons may build a house on the same plot as the parental home, and, although they may live in separate quarters, their activities and interests tend to be merged into a variation of the larger family.

MARRIAGE

Marriage as practiced in Mexico is rather elastic. Mexican census statistics classify unions of husbands and wives into four separate and distinct types, only two of which are legal. The first type is marriage by civil ceremony only. This included 14.7 per cent of all persons in the Republic who were living as husband and wife in 1940. The second type is marriage by civil and religious ceremony. This group includes 46.6 per cent of all persons living as husband and wife. The third group includes those united by religious ceremony only, and, although this is an illegal form of marriage, it accounts for 15.7 per cent of the persons living as husband and wife. The fourth and final type is *unión libre* ("free union"), which applies to couples who live together as husband and wife but who have not been united by any marriage ceremony. Into this group fall nearly one-fourth

1. Elsie Clews Parsons, *Mitla—Town of the Souls* (Chicago, 1936), p. 66.

TYPES OF MARITAL UNIONS IN MEXICO

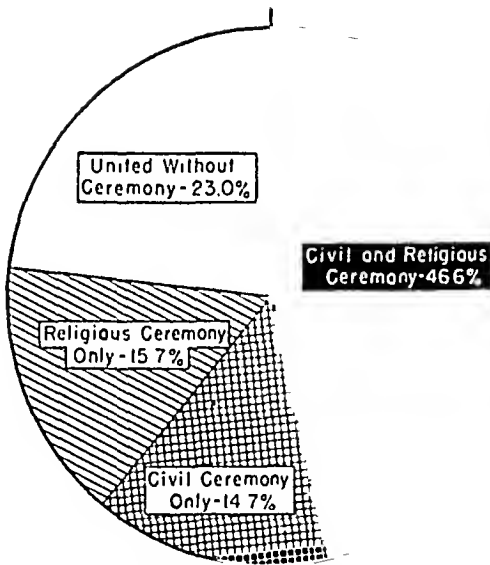


FIG. 31.—Types of marital unions in Mexico in 1940. Data from Table 77

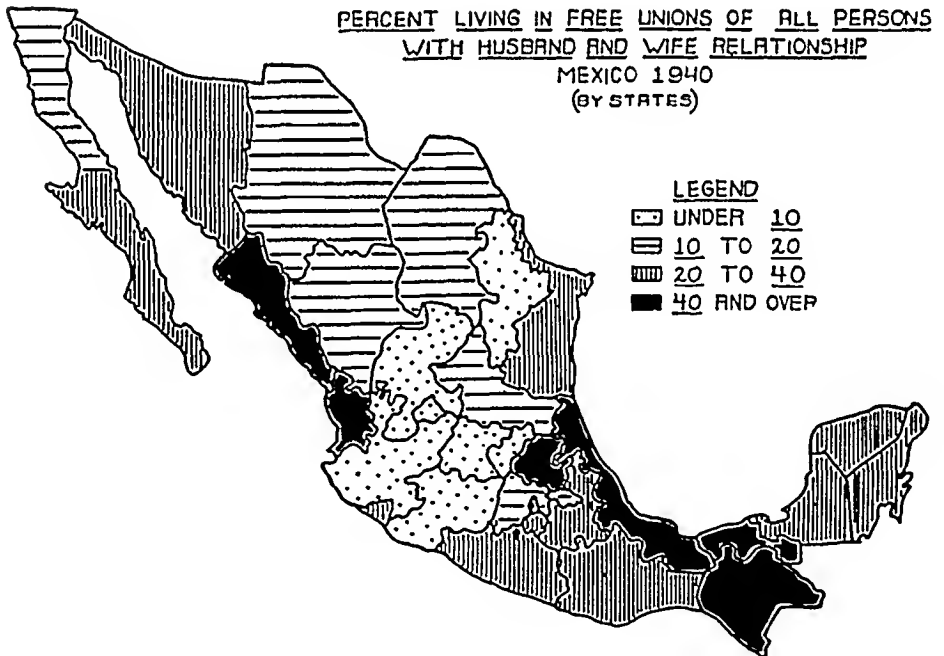


FIG. 32.—Percentage of all persons with husband and wife relationship living in free union, by states. Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

(23.0 per cent) of all persons who were living as husband and wife in 1940 (Fig. 31).

According to the Mexican Constitution, "marriage is a civil contract. Marriage and all other acts relating to the civil status of individuals shall appertain exclusively to the civil authorities" (Art. 130). Therefore, only those persons who have been married by the civil authority can be said to be legally married. In other words, according

TABLE 77

PERSONS LIVING AS HUSBAND AND WIFE CLASSIFIED ACCORDING TO TYPE OF MARRIAGE, BY AGE GROUPS AND BY SIZE OF COMMUNITY*

TYPE OF MARRIAGE, BY AGE GROUPS	TOTAL MEXICO		LOCALITIES OF OVER 10,000 INHABITANTS		LOCALITIES OF 10,000 OR LESS INHABITANTS	
	No. of Persons	Per Cent	No. of Persons	Per Cent	No. of Persons	Per Cent
All persons	7,004,530	100 0	1,502,706	100 0	5,501,743	100 0
Married by civil ceremony only	1,029,654	14 7	239,610	15 9	790,035	14 4
Married by civil and religious ceremony	3,260,063	46 6	706,402	53 0	2,470,561	44 9
United by religious ceremony only	1,007,652	15 7	155,305	10 3	942,347	17 1
United without ceremony (free union)	1,610,270	23 0	311,470	20 7	1,298,800	23 6
Under 20 years of age	301,106	100 0	45,901	100 0	255,205	100 0
Married by civil ceremony only	68,447	22 7	12,437	27 1	56,010	21 9
Married by civil and religious ceremony	132,217	43 9	18,051	39 3	114,166	44 7
United by religious ceremony only	18,691	6 2	2,605	5 7	16,086	6 3
United without ceremony	81,751	27 2	12,808	27 9	68,943	27 0
20 to 39 years of age	1,120,040	100 0	895,397	100 0	3,224,643	100 0
Married by civil ceremony only	683,082	16 1	158,563	17 7	504,519	15 6
Married by civil and religious ceremony	1,874,585	45 5	416,698	49 0	1,427,887	44 3
United by religious ceremony only	556,007	13 5	82,710	9 2	474,188	14 7
United without ceremony	1,025,466	24 0	207,117	23 2	818,049	25 4
40 years and over	2,581,486	100 0	560,968	100 0	2,020,518	100 0
Married by civil ceremony only	297,669	11 5	68,368	12 2	229,301	11 3
Married by civil and religious ceremony	1,259,433	48 8	331,509	59 1	927,924	45 9
United by religious ceremony only	521,879	20 2	69,948	12 5	451,931	22 4
United without ceremony	502,505	19 5	91,143	16 2	411,362	20 4
Age unknown	1,907	100 0	530	100 0	1,377	100 0
Married by civil ceremony only	456	23 9	251	47 4	205	14 9
Married by civil and religious ceremony	728	38 2	144	27 2	584	42 4
United by religious ceremony only	175	9 2	33	6 2	142	10 3
United without ceremony	548	28 7	102	19 2	446	32 4

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

to Mexican law, only 61.3 per cent of the persons living as husband and wife are legally married, and 38.7 per cent are illegally mated.

The percentage of all persons with husband-and-wife relationship who were living in free union in 1940 is shown by states in Figure 32. Forty per cent or more were living in free union in the six states of Veracruz, Tabasco, Chiapas, Hidalgo, Nayarit, and Sinaloa. The percentage was from 20 to 40 in eleven other states.

The data on types of marital unions according to age groups and according to size of community are presented in Table 77. The following observations seem to be suggested by these data:

1. The proportion of persons living in free union is higher in the rural districts than in the urban; but even in localities with a population of more than 10,000 the proportion living in free union is one out of five, or 20.7 per cent. It is 23.6 per cent for localities with less than 10,000 inhabitants.

2. The proportion living in free union is greater among the younger age groups and declines with increasing age. This relationship holds true for persons living in cities of over 10,000 as well as for those living in localities of less than 10,000. Thus the proportion living in free union is 27.2 per cent for persons under twenty years of age; it is 24.9 for those in the age group twenty to thirty-nine; and it is 19.5 for persons forty years of age and over.

The relatively higher proportion of young people living in free union may be interpreted to mean that many persons begin their husband-and-wife relationships by mutual consent without any ceremony but that some of them have a marriage ceremony performed at a later date. Sometimes this ceremony awaits the acquisition of funds with which to pay the fees and does not take place until a number of children have been born. Thus, in 1942, the federal government put on a campaign encouraging persons living in free union to take advantage of a government-sponsored plan to hold collective marriage ceremonies throughout the Republic for the purpose of legally uniting those couples who had been living in free union. December twentieth was designated as the day for performing the collective marriages, and about fifty thousand couples throughout the country took advantage of the opportunity to become legally married free of charge. Many of these were mature couples with children old enough to be in the national draft for the army. The account given of these proceedings in *El Universal*, one of the three leading newspapers in Mexico City, is in part as follows:

The Government of Mexico, through the efforts of the Secretariat of Public Assistance, legalized yesterday the marital union of more than 50,000 couples in the Republic and the first result of this act was the registration of the children in the great book of national citizenship and the legal recognition of them by their parents as offspring of a legitimate union. Doctor Gustavo Baz, Secretary of Public Assistance, made a speech during the collective marriage which took place in the Capital of the Republic, where approximately seven hundred and fifty couples came to request this important legal assistance. . . .

Judging by the telegrams received yesterday by the Secretariat, there was no town either large or small in the Republic where marriages did not take place. Civic celebrations were held in honor of the marrying couples, among them being several banquets attended by the authorities, the couples, their children,

and the witnesses of each marriage. Yesterday was indeed an important day in our country since besides the legalization of the free love unions, it witnessed the first draft in our military history of the young men who must serve their country within the ranks of the National Army. There were numerous cases in which at the same time that the former free lovers were being married their children were being drafted into the Army. . . .

The short collective ceremony started in the afternoon, being opened by Dr. Zubirán who read the usual marriage declaration containing a brief and informal explanation of the meaning of marriage and of what society expects of those who establish a home.

After this, Dr. Baz made his short speech which was broadcast to all corners of the country. . . .

He explained once more that the main purpose of the Government in organizing this marriage crusade is obtaining for the children, in the first place, their Mexican nationality, and, in the second place, protection against any emergency.

. . . . In the *Escuela Federal Tipo* of Guadalajara, 200 marriages were legalized. The majority of the men getting married were soldiers and among the couples there were six women under age,² whose parents gave their consent.

In the patio of the Government Palace of Puebla 289 couples were married, among them Angel Huerta Vivanco, 40 years old, and Eulalia Yañez, 35 years old, who have nine children.

Ninety-three couples were married in the Municipal Palace of Querétaro, 310 children being thereby legalized.

In the reception hall of the Government Palace of Chilpancingo and in the presence of the Governor of Guerrero, 17 couples were married.

A large number of couples legalized their union in the Capital of the State of Chihuahua at noon yesterday.

In Pachuca forty-five collective marriages took place at the *Casino del Charro*.

In Morelia eighty couples legalized their union in the offices of the Civil Registry.

In the city of Saltillo 105 couples were married, and others were also married free of charge in the church of *San Esteban*.

In Tampico, the collective marriage of 300 couples took place, witnessed by the Municipal President.³

Referring again to Table 77, it should be noted that the proportion of persons married by "civil ceremony only" is greatest for the younger age groups and declines as the age group increases. Thus, while 22.7 per cent of all persons under twenty years of age were married by "civil ceremony only," the percentage drops to 11.5 for persons forty years of age and over. Similar differences are found in both cities and rural districts, except that the change is more marked in the cities. On the other hand, the proportion of persons united by

2. The legal age for marriage of women in Mexico is fourteen years. The consent of the parents is required, however, until age twenty-one.

3. *El Universal*, December 21, 1942.

“religious ceremony only” tends to increase as one passes from the lower to the higher age brackets.

The higher proportion of strictly church marriages among the older groups and the low proportion among young people may reflect increasing tendency to conform to the law and to have civil ceremonies precede religious services. If this reasoning is correct, the strictly church marriages among the older age groups could be regarded as holdovers from past years. The relatively greater proportion of strictly church marriages in the rural districts, as compared with the cities, may reflect greater ignorance of the law on the part of the laymen, greater reluctance to comply with it on the part of the priests, and relatively greater confidence in the religious than in the civil ceremony on the part of rural inhabitants.

The proportion of persons united by both civil and religious ceremony also increases with age in the cities but remains practically constant in the rural districts.

Numerous observers have voiced the opinion that the indigenous population has much greater respect generally for the church ceremonies than for the civil and that they do not consider themselves properly married when only the civil ceremony is used. This is probably due to the association of marriage with religion, to the greater impressiveness and formality of the church ritual, and to the greater respect which they have for the priest and the church when matters of intimate family concern are involved. Concerning marriage practices among the rural population of the valley of Teotihuacán, Gamio says:

Marriage by civil law is not usually accepted, as is the case in many regions of our Republic, and only persons who own property of some importance go to court, as a precaution against future consequences.

This lack of observance of the law is due to resistance on the part of the inhabitants of the villages to pay the official fees as well as to fear of the Government, the expressions and formalities of which they dislike.

The religious ceremony costs from eight to thirty pesos, and since the priests never perform a marriage ceremony for less than eight pesos even when the parties are destitute, if the latter are not able to obtain this amount, they live as husband and wife without legalizing their union, because they feel that a legal marriage is not worth two pesos.

In case they have the eight pesos to pay the priest, they are even less likely to go to the judge, since then they get married through the Church only. We have known numerous couples who have lived under such conditions for many years. When we inquired why they had not married, they argued that the judge charged

two pesos to marry them and they did not have that much money, so that they were waiting for better times to get married.⁴

Data which would indicate clearly the relative stability of these different types of marital unions are lacking. Nevertheless, investigations have been made in specific rural areas, which, when pieced together, might give us at least some notion as to how these unions work out in rural Mexico as a whole. Perhaps the most comprehensive of these special studies is that made under the direction of Gamio in the valley of Teotihuacán. From it we quote at some length:

As we have said before, the number of illegitimate unions is very large. . . . The fundamental reason, we repeat, is economic in nature. In the majority of cases there is no consideration of personal interest, that is, of the ease of separation at any time when there is no permanent bond uniting the parties. The men regard their women with the same respect as if they were legally married and consider them theirs for life. Thus one usually finds couples with eight or ten children who have been living as husband and wife since the time the first child was conceived. They have not married, in the first place, because of lack of means to pay the judge and the priest; and, in the second place, due to the negligence with which they view such matters. They respect and love each other in the same way as the Indians who are duly married. One seldom finds Indians purposely living together without being married because of the thought of obtaining their freedom at any moment. . . . But in such instances, which show a certain degree of worldliness, the bad influence of the city may be observed, since the others never consider such things, not through morality but rather through custom. . . .

. . . for them, sacrament is something they do not understand, in spite of their being strong Catholics and in spite of the anathemas of the priests. . . . In the great majority of the cases the free unions are lifelong. Those living in concubinage get married if they have the means, without giving importance to the sacrament, and as regards the civil marriage, they consider it a formality which costs two pesos and which comes from the Government, of which they are always a little suspicious.

This does not mean that women may have sex relations with any man; they do only with their man, and when they have a man they consider it wrong to have relations with other men; but when the man is no more, either through death, desertion, or mutual understanding, they feel free to accept another man, whom they henceforth consider their man and whom they respect in accordance with their custom, being faithful to him until another change occurs. Almost always, a man and a woman live their whole lives together, are faithful to each other and have a large family; in a few cases, they separate through the fault of one or the other, without any feeling of guilt when they subsequently unite with others. We believe this to be the true marital psychology of the Indians.

Often when a woman unites with her man she brings three or four children,

4. Manuel Gamio, *La Población del Valle de Teotihuacán* (3 vols.; Mexico City, 1922), II, 247.

who become part of the family as *entenados* [stepchildren]. Sometimes, the husband brings the children taken away from his former concubine, which were not claimed by the latter, and these, together with the new ones born every year, form a large assortment of children of various colors and features and with different surnames, except when there is an understanding to adopt one surname. . . .

Adultery in the region has a unique character: it is permanent when it takes place. Let us explain this statement. There are unions of individuals who have been respectively married and who have abandoned their spouses in order to live together as husbands and wives.

It is very seldom that a woman who lives with her husband has sexual relations with another man. The Indian does not know of these things and when a woman, for any reason, does not wish to live with her legitimate husband, she goes to live with her lover giving up all contact with her former man. Therefore an almost perfect monogamy prevails and only in exceptional cases is a man related separately with two women and, vice-versa, a woman with several men. Adulterous unions take place with the knowledge and consent of the abandoned spouses and are tacitly accepted by the neighbors, without a single expression of protest or displeasure. This is a paradox worthy of study, since in spite of the fact that the Indians are devout Catholics, they see these immoral desecrations with indifference. . . .

. . . . Adultery, such as is observed in the cities, is only practiced by individuals of a higher social and economic level. It occurs among those who have more means, lead an easy and secure life, and do not have to exhaust their strength or use their minds in their daily work.

Sometimes one finds in the villages of this region single women who have children with aristocratic surnames. The illicit relations of some men of property—legally married and with legitimate children—with some of these women, are not a secret; but there is an absolute indifference on the part of the inhabitants and the adulterer is not considered any less worthy of esteem, perhaps because since he is a man of property all his actions inspire respect.⁵

Gamio's study repeatedly suggests that both the free unions and the legitimate marriages are much less stable on the haciendas than in the free villages. The reason for this is attributed to contact of the hacienda population with a large number of floating workers who go from hacienda to hacienda and who have acquired appetites and desires which are not found among the Indians of the more isolated free villages. Many of these migratory workers have learned how to take advantage of the free-union custom to satisfy their own selfish desires, and they have learned to show about as little respect for the legitimate marriage as for the free union.⁶ In this connection it is interesting to note the description and explanation of marriage customs among the peons on the coffee plantations in the state of Vera-

5. *Ibid.*, pp. 247–51.

6. *Ibid.*, p. 249.

cruz as portrayed by Charles Macomb Flandrau, whose work entitled *Viva México* is based on prolonged and intimate observation on his brother's hacienda during the latter years of the Díaz regime. Flandrau blames the church for not developing strong moral attitudes toward the marriage ceremony and for making marriage too expensive for the Indian. Although his book was originally published in 1908, it reflects a point of view which is still held by many residents of Mexico. His discussion is as follows:

Among the lower classes in Mexico "free love" is not the sociological experiment it sometimes tries to be in more civilized communities. It is a convention, an institution, and, in the existing conditions of affairs, a necessity. Let me explain.

The Mexicans are an excessively passionate people and their passions develop at an early age (I employ the words in a specific sense), not only because nature has so ordered it, but because, owing to the way in which they live—whole families, not to mention animals, in a small, one-roomed house—the elemental facts of life are known to them from the time they can see with their eyes and hear with their ears. . . .

It seems to have been proven that for people in general certain rigid social laws are a comfort and an aid to a higher, steadier standard of thought and life. In communities where such usages obtain, the ordinary person, in taking unto himself a wife, does so with a feeling of finality. On one's wedding day, but little thought is given, I fancy, to the legal loopholes of escape. It strikes one as strange . . . that a powerful Church (a Church, moreover, that regards marriage as a sacrament) should deliberately place insuperable obstacles in the path of persons who for the time being, at least, have every desire to tread the straight and narrow way. This, . . . the Church in Mexico does.

The only legally valid marriage ceremony in Mexico is the civil ceremony, but to a Mexican peon the civil ceremony means nothing whatever; he can't grasp its significance, and there is nothing in the prosaic, businesslike proceeding to touch his heart and stir his imagination. The only ceremony he recognizes is one conducted by a priest in a church. When he is married by a priest he believes himself to be married—which for moral and spiritual purposes is just as valuable as if he actually were. One would suppose that the Church would recognize this and encourage unions of more or less stability by making marriage inexpensive and easy. . . . For performing the marriage ceremony it charges much more than poor people can pay without going into debt. Now and then they go into debt; more often they dispense with the ceremony. On my ranch, for instance, very few of the "married" people are married. Almost every grown man lives with a woman who makes his *tortillas* and bears him children, and about some of these households, there is an air of permanence and content. But with the death of mutual desire there is nothing that tends to turn the scale in favor of permanence; no sense of obligation, no respect for a vague authority higher and better than oneself, no adverse public opinion. Half an hour of ennui, or some one seen for a moment from a new point of view—and all is over. The man goes his way, the woman hers. The children, retaining their father's name, remain, as a rule, with the mother. And soon there is a new set of combinations. One woman

who worked here had three small children—everyone with a different surname; the name of its father. While here, she kept house with the *mayordomo*, who for no reason in particular had wearied of the wife he had married in church. No one thought it odd that she should have three children by different men, or that she should live with the *mayordomo*, or that the *mayordomo* should tire of his wife and live with her. As a matter of fact there was nothing odd about it. No one was doing wrong, no one was “flying in the face of public opinion.” She and the three men who had successively deserted her, the *mayordomo* who found it convenient to form an alliance with her, and his wife, who betook herself to a neighboring ranch and annexed a boy of sixteen, were all simply living their lives in accordance with the promptings they had never been taught to resist. . . . At an early age when they first fall in love, they would, I think, almost always prefer to be married. But where get the ten pesos, without which the Church refuses to make them man and wife? The idea of saving and waiting is to them, of course, utterly preposterous. Why should it not be? What tangible advantage to them would there be in postponement? The Church, which has always been successful in developing and maintaining prejudices, could have developed, had it wished to, the strongest prejudice in favor of matrimony, and the permanence of the marriage tie. But it has not done so, and now, even when peons do have the religious ceremony performed, they do not consider it binding. After having gone to so much expense, they are not likely to separate so soon; but that is all.⁷

The importance of church fees in deterring ecclesiastical marriage ceremonies is illustrated by Parson's study of Mitla, Oaxaca. The first year she was there, only three weddings took place; but the following year a new priest came to the town and reduced the fee for the marriage ceremony for poor people from 15 pesos to 2 pesos, with the result that there were fifteen weddings the second year, all retroactive, so to speak.⁸ Mrs. Parsons also makes the observation that

older couples rarely separate, but among the younger ones there are a good many separations without formality. . . . Since in most cases there has been no wedding . . . and since the theory prevails that people who are not having a good life together had better not stay together, quite naturally they separate and find other mates. It is, in fact, a condition of trial marriage, in theory as in practice, for people say that where the couple has not lived together before it never turns out well.⁹

Redfield's studies in the Yucatán Peninsula seem to indicate that marital unions are much more permanent in the more isolated rural communities and become increasingly more unstable as contacts with urban communities become more frequent. In the isolated Indian village of Tusik, in the territory of Quintana Roo, he finds mari-

7. Charles Macomb Flandrau, *Viva México!* (New York, 1942), pp. 90-94. Reprinted by permission of the D. Appleton-Century Company.

8. Parsons, *op. cit.*, p. 100.

9. *Ibid.*, p. 116.

tal unions very enduring. There are no divorces, and desertion as well as adultery is punished with severe flogging by the local authorities. "A man and woman who have undertaken matrimony are expected to continue to live together, and sanctions, sacred and secular, enforce this expectation. A deserting husband is subject to religious, familial, and civil sanctions. . . . When a young couple are established in marriage, their adult life is assured; the relations they are to have to each other, to the kinsmen of each, and to the sponsors of their marriage are fixed."¹⁰ In the rural but less isolated village of Chan Kom, Yucatán, which, according to the census of 1940, had 270 inhabitants, conditions are somewhat similar, except that marriages are less stable and punishments for infractions of moral codes relating to the stability of the family are less severe. Desertions occur occasionally and divorce is not entirely unknown. "In Chan Kom a wife's adultery is still an offense against the husband, for which he may punish the wife or bring about her punishment, but it is not a reason for breaking up a marriage. And the cases of desertion or of separation that did occur in Chan Kom were all cases in which there were no small children of the couple."¹¹ In the large village of Dzitás, which, according to the 1940 census, had a population of 1,648, but which is so situated that there is frequent contact with the large city of Mérida, Redfield claims that

. . . separation, desertion, and divorce are common; marriages are brittle; many people have a number of consorts successively. The notion that a woman should endure everything from her husband without turning against him is preserved by the older people as an ideal, but in fact domestic disputes are notoriously common. There are even cases where a woman strikes her husband and then brings suit for divorce and secures a share of the family property. Opportunities for employment are open to women; there are women who prefer employment in Merida to being a wife in Dzitas, and say so. It is difficult in cases to tell when an elementary family comes into existence, because a man may sleep occasionally with a woman without public recognition until the association reaches such social acceptance that the woman comes to be called his "*esposa*"; yet he may have a legal wife in some other community and be maintaining that home also. In Merida, too, desertion is frequent, and new elementary families are often set up without formality and at the expense of previously existing families.¹²

From what has been said thus far, it becomes evident that the stability of marital unions varies greatly from one area to another and that marriage and divorce statistics in Mexico have very little

10. Robert Redfield, *The Folk Culture of Yucatan* (Chicago, 1941) . . . 189, 190.

11. *Ibid.*, p. 191.

12. " . . .

value as an indication of family stability. So many marital unions, separations, and desertions take place among the lower classes which are not in any way recorded on the civil register that any figure which is recorded as a divorce rate is ridiculously low, at least in so far as it is intended to give an indication of family disintegration. For example, the divorce rate in Mexico for the year 1940 is recorded as 0.2 per thousand inhabitants as compared with a rate of 2.0 per thousand for the United States. These figures, if taken at their face value, might indicate a rate of family disorganization in the United States ten times as great as that found in Mexico. Yet if accurate information were available concerning separations and desertions which are not recorded, the differences might be considerably smaller. Likewise, the number of marriages per thousand inhabitants in 1940 was only 7.5 in Mexico, as compared with 11.9 in the United States;¹³ yet marital unions take place at an earlier age in Mexico than in the United States. Obviously, the Mexican marriage statistics do not include the large number of free unions that are formed each year.

Although formal divorce is much less common in Mexico than in the United States, the Mexican divorce laws are about as liberal. The principal grounds for divorce are as follows:¹⁴ (1) adultery on the part of either spouse; (2) immoral acts on the part of either spouse designed to corrupt the children; (3) infection with syphilis, tuberculosis, or any chronic or incurable disease that is hereditary or contagious; and incurable impotency; (4) infection with incurable mental disease; (5) absence from the conjugal home for more than six months at one time without just cause; (6) cruelty, serious threats, or injury to one spouse or the other; (7) false accusation of one spouse by the other of a crime that carries a penalty of more than two years' imprisonment; (8) commission of a crime which carries a penalty of more than two years' imprisonment; (9) habitual gambling or drunkenness or excessive and persistent use of enervating drugs; (10) commission by one spouse of an act against the person or property of the other that would be punishable by more than one year's imprisonment if committed against anyone else; and (11) mutual consent.

Divorce is becoming so easy to obtain in certain Mexican cities that clients are being attracted from the United States. Cuernavaca and Ciudad Juárez are beginning to compete with Reno and Las Vegas.

13. *Population Index*, July, 1944, p. 216.

14. *Leyes civiles* (Mexico City, 1942), p. 26. (Courtesy of Harold W. Bentley.)

LEGITIMACY OF BIRTHS

From what has been said concerning the elasticity of the term "marriage," it will not be surprising to learn that a large number of births in Mexico are illegitimate. The Mexican laws make no distinction between legitimate and illegitimate children, and ordinarily there is no recording of such distinctions on the public records; but such information is being recorded along with other data dealing with vital statistics in a sample of 265 municipalities distributed

TABLE 78

NUMBER OF BIRTHS IN MEXICO IN 1940, CLASSIFIED ACCORDING TO
LEGITIMACY AND ILLEGITIMACY, BY ORDER OF BIRTH*

(A Sample of 265 Municipalities of Mexico, Representing 3,219,179
Inhabitants or 16 Per Cent of the Total Population of Mexico)

ORDER OF BIRTH	TOTAL BIRTHS		LEGITIMATE BIRTHS		ILLEGITIMATE BIRTHS		UNKNOWN	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
First child. . . .	43,428	100.0	27,442	63.2	14,718	33.9	1,268	2.9
Second child. . .	35,175	100.0	24,420	69.4	10,006	28.4	749	2.1
Third child. . .	29,741	100.0	21,171	71.2	7,965	26.8	605	2.0
Fourth child. . .	22,539	100.0	16,193	71.8	5,969	26.5	377	1.7
Fifth child. . . .	16,519	100.0	11,754	71.2	4,519	27.4	246	1.5
Sixth child. . . .	13,037	100.0	8,977	68.9	3,877	29.7	183	1.4
Seventh child. .	10,245	100.0	7,043	68.7	3,077	30.0	125	1.2
Eighth child. . .	5,801	100.0	3,940	67.9	1,799	31.0	62	1.1
Ninth child. . .	3,992	100.0	2,679	67.1	1,244	31.2	69	1.7
Tenth child. . . .	2,687	100.0	1,841	68.5	812	30.2	34	1.3
Eleventh child and over.	3,431	100.0	2,423	70.6	974	28.4	34	1.0
Order unknown.	3,980	100.0	2,294	57.6	1,472	37.0	214	5.4
Total.	190,575	100.0	130,177	68.3	56,432	29.6	3,966	2.1

* Data from Dirección General de Estadística.

throughout the country and selected to represent a sample of conditions in the entire Republic. Data on illegitimacy are presented in Table 78 for 190,575 births in these sample municipalities in 1940. Of the total number, 29.6 per cent were illegitimate, 68.3 were legitimate, and data were unavailable for 2.1 per cent. When children are listed according to order of birth, as in this table, there appears to be little difference in illegitimacy. It is slightly higher for first children, of whom one-third are illegitimate, but is surprisingly high for all the others, even to the eleventh child and beyond. This would seem to suggest that illegitimacy is not due entirely to promiscuity of sexual

relations before marriage but is due mostly to the failure of many couples rearing families to marry at all.

Probably one of the highest rates of illegitimacy resulting from promiscuity outside the family circle is found among the servant class of the larger cities. Though most of the servant girls are single, many of them have one or more children by different fathers with whom they have never lived. The servant of the author's family, for example, assured us when she first accepted employment that she was unattached. Within two weeks we learned that, though unmarried, she was the mother of a two-year-old child and was very proud to tell us that its father was a Frenchman for whom she had worked in a factory and who already had a family. Numerous friends have servants who are unmarried mothers. Some keep their children with them on the job, others leave them with relatives.

AGE AT MARRIAGE

Marital unions often take place at an early age in Mexico. The legal age for marriage is fourteen for girls and sixteen for boys. Sometimes, however, unions take place before that time. Even among the upper classes in Mexico City, girls are presented to society as debutantes at the age of fifteen. Marriage usually takes place in the rural areas at a lower age than in the cities and in the tropical areas at a lower age than in the Central Mesa. During the author's visit to rural districts of Yucatán he was informed by several persons that marital unions sometimes begin when the girl is only twelve years of age and the boy about fourteen. Unfortunately, the Mexican census does not record marital status for persons below the legal marriageable age. All boys under sixteen and girls under fourteen are classified as minors (*menores de edad*) whether they are living in marital unions or not. This makes it impossible to say how many of these minors are actually living in husband-and-wife relationships; from the author's travels, however, he is sure that in certain parts of the Republic the number is fairly large. Mexicans tend to marry considerably younger than do residents of the United States. This is shown by data from the census of 1940 for each country. Of all females fourteen to nineteen years of age inclusive, 20.3 per cent of those in Mexico are classified as living in marital unions, while only 9.8 per cent of those in the United States were classified as married. Likewise, when the marital status of males aged sixteen to nineteen inclusive is compared for the two countries, it is found that in Mexico 6.0 per cent are living

in marital unions as compared with only 2.1 per cent in the United States.

Table 79 shows a comparison for the two countries of the marital status of all persons twenty years of age and over for the year 1940. The proportion of single and of divorced persons is greater in the United States. The married (including free unions) and widows are found in greater proportions in Mexico.

TABLE 79

POPULATION TWENTY YEARS OF AGE AND OVER CLASSIFIED ACCORDING TO MARITAL STATUS: A COMPARISON OF MEXICO AND THE UNITED STATES*

MARITAL STATUS	MEXICO		UNITED STATES	
	No. of Persons	Per Cent of Total	No. of Persons	Per Cent of Total
Single.....	1,810,856	18.9	17,631,179	20.4
Married.....	6,703,330†	70.1	59,459,347	68.8
Widowed.....	997,955	10.4	7,836,190	9.1
Divorced.....	41,024	0.4	1,436,955	1.7
Unknown status.....	7,941	0.1	.....	.....
Total population 20 years of age and over	9,561,106	100.0	86,363,671	100.0

* Data for Mexico from *Sexto censo de población (1940)* (Dirección General de Estadística); data for the United States from the *Sixteenth Census of the United States (1940)*.

† This includes all persons living as husband and wife whether married by civil ceremony only, by civil and religious ceremony, by religious ceremony only, or merely living in free unions.

FERTILITY OF MEXICAN FAMILIES

Mexican families generally are prolific. The birth rate in 1945 was 43.7 per 1,000 inhabitants (preliminary data) as compared with 19.8 in the United States. It was, therefore, 121 per cent greater in Mexico. The birth rate in Mexico is probably one of the highest in the Western Hemisphere. This is indicated by data from other Latin-American countries. In 1943, for example, the following rates were found: Costa Rica, 43.1; El Salvador, 38.1; Venezuela, 36.3; Chile, 33.1; Colombia, 32.9; and Argentina, 24.4.

A measure of fertility which is widely used among demographers is to relate the number of children under five years of age to the number of women fifteen to forty-four years of age, as in Table 80. In Mexico in 1940 there were 630 children under five years per 1,000 women fifteen to forty-four years of age, as compared with only 329

in the United States. According to this measure (commonly known as the "fertility ratio"), the fertility of Mexican women was 91.5 per cent greater than that of women in the United States. Differences are also evident between rural and urban areas of both countries, with the rural districts and smaller communities having a much higher rate of fertility in each case. In Mexico, however, the fertility ratio is 439.2 for cities with more than 10,000 inhabitants as compared with only 256.7 for urban areas in the United States. In localities with 10,000 inhabitants or less the fertility ratio in Mexico is 696.2, or 57.6

TABLE 80

NUMBER OF CHILDREN UNDER FIVE YEARS OF AGE PER 1,000 WOMEN
AGED FIFTEEN TO FORTY-FOUR IN MEXICO AND IN THE
UNITED STATES, BY DEGREE OF URBAN INFLUENCE*

Country and Degree of Urban Influence	No. of Children under 5 Years of Age	No. of Women Aged 15-44 Inclusive	No. of Chil- dren per 1,000 Women Aged 15-44
Mexico			
Localities of over 10,000 in- habitants.....	515,761	1,172,868	439.2
Localities of 10,000 or less inhabitants.....	2,349,131	3,374,070	696.2
Total.....	2,864,892	4,546,938	630.1
United States			
Urban.....	5,007,137	19,502,152	256.7
Rural.....	5,534,387	12,533,139	441.6
Rural nonfarm.....	2,522,831	6,313,713	399.6
Rural farm.....	3,011,556	6,219,426	484.2
Total.....	10,541,524	32,035,291	329.1

* Data for Mexico compiled from *Sexto censo de población* (1940) (Dirección General de Estadística); data for United States from the *Sixteenth Census of the United States* (1940).

per cent higher than among the rural farm population of the United States.

The median number of individuals per family in Mexico as calculated from the census of 1940 was 4, while the mean number was 4.1. These averages are larger than corresponding averages for families in the United States, where, in 1940, the median number of individuals per family was 3.3 and the mean 3.8. The averages are smaller in Mexico, however, than data on fertility would lead one to suppose. The families of Mexico and those of the United States are classified according to number of persons per family in Table 81. The proportion of units consisting of only one individual living apart from a

family group is surprisingly greater in Mexico (12.7 per cent) than it is in the United States (7.7 per cent). The seemingly small family in Mexico, therefore, may be due partly to mere differences in definition as to what constitutes a one-person family. There is no ready logical explanation for the prevalence in Mexico of a much larger proportion of one-person families than are found in the United States. Mexicans generally marry at a younger age and divorces are less frequent. As

TABLE 81
FAMILIES CLASSIFIED ACCORDING TO NUMBER OF PERSONS PER FAMILY
A COMPARISON OF MEXICO AND THE UNITED STATES*

No. of Persons per Family	Mexico						United States	
	Total		Male		Female		Total	
	No. of Families	Per Cent	No. of Families	Per Cent	No. of Families	Per Cent	No. of Families	Per Cent
One	611,670	12.7	264,224	23.1	347,446	6.5	2,577,261	7.7
Two	886,140	17.4	412,777	35.5	473,363	8.9	3,850,861	36.8
Three	797,703	15.9	357,712	30.2	439,991	8.2	7,786,193	22.8
Four	720,173	14.3	307,500	26.4	412,673	7.8	6,026,523	18.1
Five	610,612	12.1	257,112	22.1	353,500	6.6	5,112,520	15.5
Six	405,492	8.0	127,711	10.9	277,781	5.2	3,056,277	9.2
Seven	327,247	6.4	71,230	6.1	256,017	4.8	2,291,500	6.9
Eight	207,632	4.1	37,523	3.2	170,109	3.2	1,511,532	4.5
Nine	117,877	2.3	360	.03	117,517	.22	825,730	2.5
Ten	61,711	.1	131	.01	61,580	.12	252,623	.7
Eleven or more	42,322	.1	231	.02	42,091	.08	231,572	.7
Total	4,812,412	100.0	1,137,121	100.0	3,675,291	100.0	38,258,392	100.0

* Data for Mexico from *Censos de Población y Vivienda*, 1930, Dirección General de Estadística, 1932, for the United States from the *Marriage, Divorce, Remarriage, and remarriage*, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 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25.5 per cent of all families contain six or more members as compared with only 15.6 per cent in the United States.

The size of Mexico's families varies according to rural and urban residence. The one-person variety is much more frequent in urban communities. In cities of over 10,000 inhabitants 23.1 per cent are of this type, as compared with only 9.5 per cent in places with less than 10,000. Family units consisting of only 2 persons are also slightly more prevalent in the cities. But families with 3 members and more are pro-

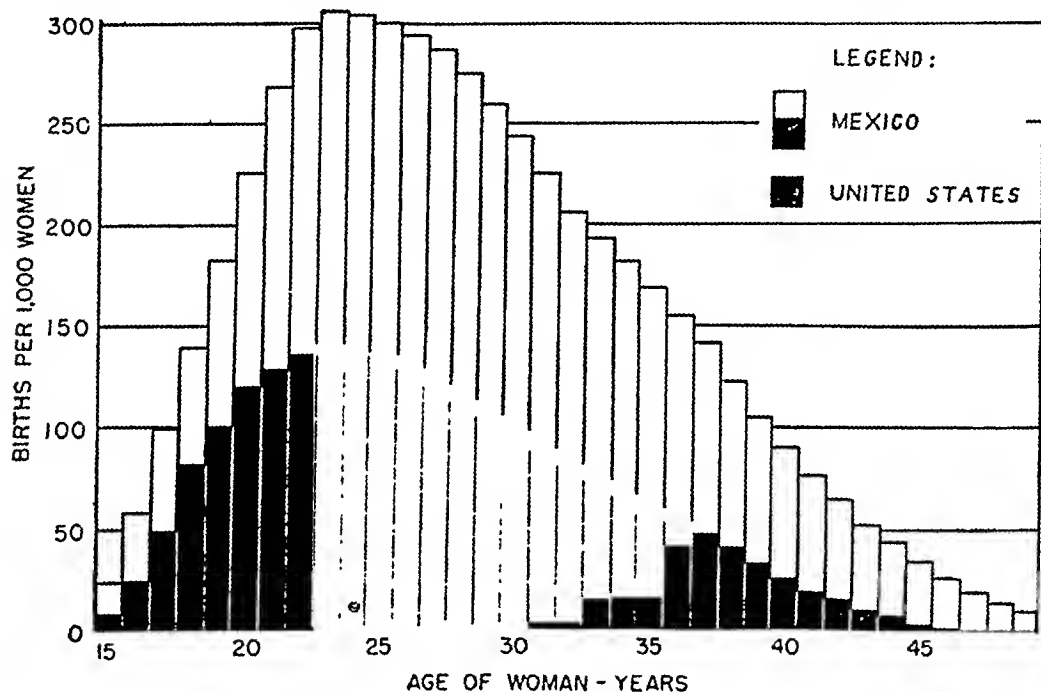


FIG. 33.—Number of births per 1,000 women fifteen to forty-nine years of age in Mexico, 1939, and in the United States, 1938, according to the ages of the women. (Courtesy of Wilson H. Grabill of the U.S. Bureau of the Census.)

portionately more frequent in the rural districts. Thus 28.2 per cent of all families in localities having less than 10,000 inhabitants contain 6 persons or more as compared with only 17.1 per cent in cities with more than 10,000. The average family in the cities has 3.8 members as compared with 4.2 for the places with less than 10,000. The median size of the family in the latter group is 4 as compared with 3 for the cities.

The very high fertility rate among Mexican women in comparison with that among women in the United States is illustrated graphically in Figure 33. This chart shows the number of births per thousand women from fifteen to forty-nine years of age for Mexico in 1939 and

corresponding data for the United States in 1938.¹⁵ The white portion of each bar indicates the surplus of Mexican births over those in the United States for each thousand women of the age indicated on the horizontal scale. At almost every age of the women the number of births is several times as large in Mexico as in the United States. The differences between the two countries are accentuated among women at the older ages. The number of births is extremely high among Mexican women between the ages of twenty-two and twenty-six. For these ages there are about 300 births per thousand women of all marital-status classes taken together. This would probably mean that for many married women children are born about as frequently as nature permits.

ROLES PLAYED BY FAMILY MEMBERS

Little information is available concerning the roles played by Mexican family members. Few objective studies have been made. There appears to be wide variation in customs among social classes and among different regions of the country. One hesitates to generalize on the basis of meager information. Therefore, the following pages represent observations which are tentative in character and must be subjected to subsequent verification.

Ordinarily, boys and girls are not allowed to associate together very much beyond seven or eight years of age, except within the family group. There has been much debate as to whether boys and girls should be permitted to attend the same schools even in the primary grades. In the rural schools generally, the policy in recent years has been to foster coeducation. However, this policy was reversed by a revision of the federal school laws in 1942, requiring that education be unisexual beyond the second grade, except where lack of funds or other reasons make this inadvisable.¹⁶

According to this new law, the schools for boys are to be taught by men and the schools for girls by women. The reasoning behind the legislation is that girls have a mission to perform in life different from that of boys and that the more association there is between boys and girls, the greater is the likelihood that their respective roles may

15. These data are taken from an unpublished paper by Wilson H. Grabill, entitled "Population Growth and Fertility in Mexico." The rates shown were obtained by interpolation of data for five-year age groups. The rates for the United States were adjusted for underregistration of births; those for Mexico were not.

16. *Ley orgánica de la educación pública*, chap. 8, Art. 62.

become merged and confused. It is feared that coeducation, even in the primary grades, may tend to make boys more effeminate and girls more masculine in behavior. The specific reasons for establishing unisexual education in the primary schools is said to rest on eight fundamental considerations regarding the respective roles of man and woman in society. These were summarized by a member of the Secretariat of Public Education as follows:¹⁷

1. The social and biological objectives of man and of woman are apparently the same; in fact, the two sexes are complimentary.

2. Man and woman are profoundly different physically, intellectually and morally. These differences do not make one the superior of the other; the characteristics proper to each sex enable them to fulfill their destinies.

3. The ideal of education is to make woman more feminine and man more masculine; in other words: education should enable the boy and the girl to emphasize the characteristics proper to their sex instead of blunting, nullifying or substituting them.

4. Since the psychology of each sex is different, it is necessary to consider whether an erroneous education may not produce the total failure of their lives.

5. For collective welfare, woman should be carefully educated to fulfill her mission as a mother, homemaker, and basis of a well constituted society.

6. Woman should be prepared to be self-sufficient; but should devote herself to those activities and professions that are suited to her natural conditions.

7. Ancient educators have stated properly that "the child is the mirror upon which the image of the teacher is reflected." This expression shows the definitive influence which teachers exert upon their students. It is a fact, that with few exceptions, orphan boys brought up by the mother acquire undesirable attitudes and the same is true of girls brought up by the father.

8. Maternal education is desirable for both sexes up to the age of six years; but gradually, paternal education should predominate for boys. Since man is the being with the longest infancy, it is clear that he needs the attention of the mother for a considerable period of time; but it is urgent that at the proper time the father intervene to form the boy's character.

Perhaps it should be said at this point that the legislation creating unisexual education was enacted under the leadership of V éjar V ásquez, who is generally regarded as a conservative and by some as an arch-reactionary. He was Secretary of Public Education for only a short time, beginning in 1942, and was replaced by Jaime Torres Bodet. While the recent unisexual legislation appears to be somewhat in keeping with the attitudes held by many upper-class Mexicans concerning the separate and distinct roles which boys and girls should play in society, it is regarded by many progressive educators in Mexico as reactionary in character. More than one educator in the Secretariat

17. Quoted in *Novedades* (Mexico City), December 12, 1943.

of Public Education has expressed the opinion that this legislation has retarded educational progress in Mexico. It is claimed that it requires duplication of facilities in a land where they are already inadequate and that it tends to make boys and girls conscious of their sexual differences at an unduly early age.

Girls are usually much more closely supervised than are boys, and their supervision becomes more strict as they grow older. In the rural and more isolated areas there is little that could be called courtship. Girls are usually allowed to see their suitors only in the presence of one or more older members of the family. Should it be learned that lovers have been permitted to spend any length of time alone together, there would be a great amount of gossip.

In the small towns and larger villages the most common custom which in any way serves as an institution for courting is the Sunday night *serenata*. This takes place at the plaza (public square) usually located near the center of town. There is a wide walk encircling the plaza and a mushroom-shaped bandstand in the center. In the early evening the village or town band takes its place in the stand and begins its weekly concert. The inhabitants of the town gather in their finest attire and promenade around the plaza, the women walking several abreast going clockwise and the men counterclockwise, or vice versa. The *serenata* usually lasts from one to two hours. The young men and women gaze attentively at one another as they pass. Seldom do the boys and girls pair off on such an occasion or even converse with one another; but the mere opportunity of meeting face to face at each halfway point in the circle gives rise to numerous little clandestine flirtations, some of which may develop later on into marital unions. The *serenata* is not held in the smaller villages, and it tends to disappear in the larger cities. It is still held, however, in the city of Monterrey.

In the more isolated rural areas marriage is likely to be considered a process of linking two family groups together as well as an arrangement for providing a satisfactory adult life for one's children.¹⁸ Under such circumstances marriage is a serious business and a matter for which parents accept major responsibility. A boy may exercise some influence in selecting his prospective bride, but frequently it is his parents or relatives who make all arrangements for matrimony, including the engagement. In Mitla, Oaxaca, for example, the engagement is usually the result of several nightly visits by the boy's parents

18. Redfield, *op. cit.*, p. 189.

to the home of the girl. It is unconventional for the girl and her parents to accept the offer of marriage on the first visit.¹⁹ After arrangements have been made between the parents, detailed plans are laid for the wedding. When the families have no funds with which to defray expenses, weddings are often postponed for several years, if not indefinitely, and couples start living together in free union. The cost of a church wedding in most parts of rural Mexico would probably range from 8 to 30 pesos for payment of the priest. In addition, there might be expense for hiring, or making, a wedding costume, the cost of music, and perhaps some expense for food and drinks. The cost of the civil ceremony would be only about 2 pesos. Most rural families in Mexico live at the subsistence level, however, and have difficulty in accumulating these amounts. In some areas of the Republic weddings extend over a period of several days with festivities going on continuously. Where this is the case, as in certain parts of the state of Oaxaca, weddings turn out to be expensive affairs, ranging in cost from 200 to 600 pesos.²⁰

In many areas the custom of parents' selecting mates for their children has completely broken down. This is true in some of the northern states and is also reported to be the case in the community of Arandas in the state of Jalisco.²¹

In many areas the family possesses some of the characteristics of the patriarchal type. The father, or often the oldest male, who might be the grandfather in some cases, exercises authority over the family group. It is true that modern legislation in Mexico has tended to equalize somewhat the rights of husband and wife, but much of this legislation is ignored, partly because women are generally unaware of their legal rights and partly because custom has relegated the wife to a position of dependence on the husband for financial support. The average middle- and upper-class woman would be afraid to consider getting a divorce because it might leave her without financial support and because, if she were to be divorced, she would be completely ostracized by her friends and neighbors. For these reasons, in spite of the liberal divorce laws, she will cling to her husband and tolerate behavior on his part which she may not in the least approve. The favored position of the male in this respect tends to give rise to the prevalence of a dual standard of morality among some members of the upper classes. Girls are closely guarded and sheltered all their lives. It would

19. Parsons, *op. cit.*, p. 98.

20. *Ibid.*, p. 111.

21. Paul S. Taylor, *A Spanish-Mexican Peasant Community: Arandas in Jalisco, Mexico* (Berkeley, Calif., 1933).

be considered a major family tragedy should parents become so careless as to permit a situation to arise wherein a girl might have premarital sexual relations, willingly or otherwise. On the other hand, there is no such close supervision of boys. The latter are considered to be aggressive by nature, and the major part of the responsibility for preventing premarital relations is placed on the parents of the girl.

Even after marriage the double standard seems to continue among some members of the middle and upper classes. The wife's place is considered to be in the home. She is regarded as too sacred to be exhibited very much in public. The husband often attends public and social functions either alone or with someone else. In time he may form friendships with others of the opposite sex which may lead ultimately to his keeping one or more mistresses apart from, and unknown to, his legal family. Such practices appear to be rather common among some of the upper-class males,²² although they are far from universal.

How much of this double standard of morality was brought from Spain and how much was generated in the New World we are unable to say. Certainly, conditions in New Spain during the colonial period were favorable to the development of the double standard. It will be recalled that the conquerors and most of the early settlers from Spain were males who came to Mexico without their families and that many of them mated freely with Indian women. For many years the white males greatly outnumbered the white females, and the latter were jealously guarded. The opinion has been expressed that the double standard of morality which is found among some of the upper classes today is a vestige of the early colonial practice.

The relative roles which husband and wife play vary with the social position of the family. Among the peasants the husband does not keep a mistress. This is considered a luxury which only the upper classes can afford. Among the peasant groups there is less differentiation of functions. The woman often works in the field along with her husband and does chores around the house. She has, for ages, been the one who grinds the corn²³ (by hand on the metate) for making the tortilla, which constitutes the basic food of the peasants. She carries water for long distances. She works in the home at pottery-making, weaving, and basketry.

22. See Norman S. Hayner, "Notes on the Changing Mexican Family," *American Sociological Review*, August, 1942, pp. 489-97.

23. Wallace Thompson, *The People of Mexico—Who They Are and How They Live* (New York, 1921), p. 233.

Among the upper classes it seems as if the Mexican male is determined that the wife shall play a role which is almost opposite that played by the peasant woman. She must not work outside the home. Often there are more servants in the home than there are members of the family. Her principal functions are to show absolute devotion to her husband, to bear children, and to keep the latter, especially the daughters, under her continuous supervision.

"COMPADRAZGO" ("GODPARENTHOOD")

The *compadrazgo* is one of the most interesting customs with reference to the family as an institution in the more isolated rural areas. This includes the set of relationships growing out of godparenthood. At the birth of a child, or often as soon as pregnancy is certain, the parents choose a godfather (*padrino*) and a godmother (*madrina*) for the child. The more immediate purpose of the godparents (*padrinos*) is to arrange for the baptism of the child and to accompany him through this ceremony, paying for whatever expense is involved; but among the more isolated groups there is a much broader function, of which the assuring of the baptism of the child is merely the first phase. Among these people the godparents also become spiritual co-parents (*compadres*), with all that this implies. They not only have a lifelong interest in the welfare of the godchild but are also united with the child's parents by this spiritual bond of co-parent-hood. Thus the designation of the godparents of a child actually results in the linking-together of two family groups. Since this is the case, a great deal of care and contemplation is used in selecting godparents. Gamio found in the valley of Teotihuacán that the bond of relationship between *compadres* was often stronger and more meaningful than that between blood brothers.²⁴ The *compadres* interest themselves in the general welfare of each other all through life, and it is their duty to help each other in times of trouble. If the parents of a child should die, it would be the duty of the godparents to take the godchild to their home and rear it as their own. Thus a man in trouble might be more likely to call on his *compadre* for advice and assistance than to call on his own brother.

The strong bond of affection between *compadres* in the valley of Teotihuacán was described as follows:

It is customary for the godparents to make a present to the mother of the child. The presents are in accordance with the means in each case; sometimes a

24. Gamio, *op. cit.*, II, 242.

sum of money is placed below the mat where she lies, or else a basket with chocolates, candles, cigarettes, etc., is sent as a present.

For one who knows the poverty in which they live, these celebrations are a source of wonder. The *compadre*, who earns from fifty to seventy cents a day, has to pay all the expenses. When the father dies leaving the godchild still very young, it is the duty of the *compadre* to take care of the child and accept him as a son, until he is old enough to work for himself and have his own *jacal*.

As may be observed, this spiritual bond is of greater importance than blood ties, and the position of *compadre* involves a series of duties which cannot be avoided and which, on the contrary, are accepted with true self-denial.

Brothers and uncles play a secondary role, while the *padrino* is the person to whom the most respect is shown next to the father. The worst conceivable crime is adultery between persons united by spiritual bond of *compadrazgo*. According to the Indians, it is to be condemned even more than murder.²⁵

Among the less isolated groups the institution of the *compadrazgo* is rapidly breaking down. This is definitely indicated by Redfield's studies in the Yucatán Peninsula. He found that in the isolated village of Tusik the *compadrazgo* is taken in all seriousness. The child is taught to show equal respect for his godparents and his parents; persons chosen as godparents are usually older than the actual parents so that respect of the former by the latter is appropriate; the godparents would automatically take over the child to rear if its parents should die; the same godparents function for all children born to a given couple; it is considered a sin to change godparents.²⁶ In the village of Chan Kom, which is only slightly less isolated than Tusik, the customs relating to godparenthood are carried out with almost equal respect and devotion. In the larger village of Dzitás, however, which has more frequent contacts with the city of Mérida, there is some tendency for the customs to break down. In the city of Mérida, as is probably true in most of the larger cities of Mexico, the customs have lost much of their seriousness and effectiveness and are reduced largely to formalities which involve little or no actual responsibility:

In Merida the discrepancy is even greater between what older people think should be done about baptism and what is actually done, and the relationships established are more casual and secular. Although people say that children should be baptized within a month of birth, the rite is often deferred a year or more. The selection of godparents is often guided by consideration of wealth or influence, and upper-class godparents are desired, although such persons may be reluctant to act. A case is, however, reported of a Meridano with over a thousand godchildren. The incompatibility between such a situation and the theory of sacred, special personal relationships is obvious. In Merida *compadre* is often

25. *Ibid.*, p. 243.

26. Redfield, *op. cit.*, p. 211.

used for persons not united by ritual, and it is sometimes used ironically for one who is overly friendly or who claims favors to which he has no right.²⁷

In the larger towns and cities, separate godparents are usually chosen for each child and are often younger than the parents of the godchild; in Mexico City it is not unusual for adolescent boys and girls to be chosen as godparents.

In the isolated villages of Tusik and Chan Kom in Yucatán, a child is almost invariably given the name of the saint corresponding to the day on which he was born. The finding of a name for the child is therefore simplified to the mere task of looking in the almanac for the appropriate name or of having someone else do so who knows how to read and who has an almanac.²⁸ In the cities this custom is also rapidly disappearing, as is illustrated by the fact that, out of 114 consecutive baptisms recorded for one of the leading churches in the city of Mérida, only 11 children were named after the appropriate saint.²⁹

Thus it would appear that the customs and beliefs bound up with the *compadrazgo* are strong in the isolated rural districts but are becoming steadily weaker in the areas falling under urban influences. Data presented throughout this chapter would seem to imply that this is also true of many other aspects of Mexican family life.

27. *Ibid.*, pp. 222, 223.

28. *Ibid.*, p. 226.

29. *Ibid.*, p. 227.

Education and the Rural Schools

EDUCATION PRIOR TO 1910

THE educational programs that existed in Mexico prior to 1910 were largely promoted and conducted under the auspices of the church. This was particularly true during the colonial period. Almost before the Conquest was over, the priests had begun to organize schools among the Indians and to give them instruction not only in reading and writing but in the arts and crafts as well. The beautiful church buildings which are scattered throughout Mexico today are monuments to the architecture and workmanship taught by these early Fathers.

The first school in the New World was established at Texcoco in 1523 by Fray Pedro de Gante. This first school is said to have been a true "school of action."

It is characteristic of the efforts of the educational pioneers of this period that they practised the theory that, in order to teach, the teacher must first be a disciple of his pupils. Fray Pedro and his companions learned the Aztec language. They studied Indian customs and established cordial and friendly relationships with the Indian nobles as well as with the masses. Instruction in this first school was carried on in Spanish and in the Indian (Aztec) language. Fray Pedro made every effort to relate his teachings to the natural life of his students. Through physical activities, through music and processions, by the use of pictorial illustrations and hieroglyphics, and through the medium of their own language, this far-seeing educator made the school as natural as possible for the Indians and made it truly a school of action and a school of the people. In 1526, Fray Pedro transferred his centre of operations from Texcoco to the City of Mexico proper. There he established the great Indian school of San José in connection with the convent of San Francisco. There he gathered more than 1,000 Indian children to instruct them in arts and crafts, in music, in reading, and in myriad activities. There, two hundred years before Pestalozzi, three hundred years before Froebel, and almost four hundred years before John Dewey, he had an activity school, a school based on current life.¹

1. George I. Sánchez, *Mexico: A Revolution by Education* (New York, 1936), p. 37. Reprinted by permission of the Viking Press, Inc.

There were many other priests, such as Fray Bartolomé de las Casas, Father Vasco de Quiroga, Archbishop Zumárraga, and Fray Bernardino de Sahagún, who voluntarily made severe personal sacrifices in order to establish schools and to promote other educational programs in colonial Mexico.

The first printing press in the New World was set up in Mexico in 1535, and the first book was published there the following year. What is now the National University of Mexico was founded in 1551 as the Royal and Pontifical University of Mexico—eighty-five years before Harvard was founded. From this university were conferred, prior to 1775, more than one thousand Doctor's degrees and more than twenty-five thousand Bachelor's degrees, as well as large numbers of other degrees and titles.² Mexico thus made an early start on a sound educational program that may be looked back upon as a monument to the work of the early pioneers.

Perhaps it should be mentioned, however, that the needs were so great and teachers so scarce that the comprehensive educational programs were confined to relatively few people. Preference was usually given to the children of the leaders or principal persons in the various Indian communities. Except in unusual instances, the instruction available to the masses consisted largely of instruction in the Catholic ritual and dogmas. Furthermore, it should be pointed out that mass education would have been contrary to the interests of the *encomenderos*, who lived by exploitation of Indian labor. Concerning the implied discrimination between the "principal persons" and the "plebeians," Gruening makes the following comments:

The children of the chiefs and "principal persons" were of course expected to succeed to the management of the plebeians in behalf of the *encomenderos*. Teaching which might jeopardize the subjection of the Indian was no more dreamt of in New Spain than under any system of serfdom. Popular instruction existed neither in Spain nor elsewhere on the European Continent at that time. It came into general acceptance in the United States only in the nineteenth century. It did not apply to American Negro slaves before 1865 and in but a limited degree to their descendants since. To hold the church responsible, as many have, for not installing general education in Mexico in the sixteenth century is to be guilty of an anachronism in judgment. Moreover, had the clergy desired it could probably not have done otherwise. Its royal masters commanded the teaching of the caciques' children, "in order that when they were grown they could communicate with the Spaniards . . . would be more loyal . . . and better able to teach, persuade, and order their subjects."³

2. *Ibid.*, p. 45.

3. Ernest Gruening, *Mexico and Its Heritage* (New York, 1928), pp. 243, 244. Reprinted by permission of D. Appleton-Century Company.

The limitations of the early programs, therefore, were due more to the restricted number who could participate in them than to the quality of the teaching. Regardless of whatever limitations the early program may have had, it was probably fully comparable to that available in other colonial dependencies at the time. This is indicated by Priestley:

Spanish-American civilization of the colonial period must be contrasted, if justly, only with English-American colonial culture. When this is done, disparities are minimized and discrepancies are found to be less important than popular tradition makes them.

For 300 years Spain was the chief agency in the transmission to America of European culture. Her work in that field deserves warm praise for its depth, breadth, and permanency. The refinements of colonial life which accompanied the conquest were inferior to those of no other colonial agency; they approached closely the excellencies then manifested in European culture itself. They were visible in the development of education, literature, painting, and sculpture, music and the drama, in architecture, and in social amenities which continue today the happy characteristics of the nations politically descended from the second greatest American colonial power.⁴

Unfortunately, however, the educational program did not continue after the sixteenth century with the same high quality that had characterized it earlier. As the church accumulated wealth, it became increasingly involved in politics and in the accumulation and administration of real estate. Rivalries developed between church and state, and they became involved in quarrels over matters of jurisdiction. The state legislated against the educational programs of the church without developing a broad program of its own; the net effect was a reduction in the amount of education given. As Sánchez says,

the landowners and government officials, by the very fact that their economic and social welfare depended upon a menial class, looked with disfavour upon the efforts of the schools to instruct the people. The bitter struggles for political and economic control between Church and State, between factions within the Church and within the State, and the almost complete lack of interest on the part of a corrupt Church-State government relegated education to an insignificant place.⁵

With increasing land monopoly, exploitation of the masses continued as a firmly established and fundamental feature of the Mexican economy, and popular education remained inconsistent with governmental policies. At the end of the Díaz regime, 70 per cent of all per-

4. Herbert I. Priestley, *The Mexican Nation: A History* (New York, 1938), pp. 150, 151. Reprinted by permission of the Macmillan Company.

5. Sánchez, *op. cit.*, p. 46. Reprinted by permission of the Viking Press, Inc.

sons in Mexico ten years of age and over could neither read nor write. Most of the schools that did exist were located in the cities, and public policy tended to regard the vast Indian masses as perpetually relegated to the bottom of the social pyramid and not capable of profiting from education. It was partly this attitude which helped to stir the masses into rebellion.

BEGINNINGS OF THE REVOLUTIONARY PROGRAM

The Revolution was fought on the assumption that the Indian would be provided with *tierra y libros* ("land and books"). When the Obregón administration came into power at the end of the Revolution, there were very few schools in the rural districts and no source from which trained rural teachers could be obtained. Normal schools had been established in the larger cities, but their curriculum was adapted to an urban atmosphere, and their graduates had no comprehension of the problems of the rural districts. Furthermore, coming from homes in the cities, the teachers were most reluctant to venture into the isolated regions where they would be subjected to the hardships and inconveniences of the backward communities. One of the first problems confronting the educators, therefore, was that of where to get teachers. A second and closely related problem was that of what to teach. A federal Secretariat of Public Education was organized in 1921, and a program designed to carry education to the Indian masses was immediately launched.

The work was begun on a small scale by selecting a few persons with strong convictions and enthusiasm for the ideals of the Revolution, even though they were not well trained. They were sent into the isolated regions to familiarize themselves with local conditions, to stimulate a desire for schools, to recommend types of training adaptable to specific areas, and to organize the schools. They were referred to as "missioners," or *misioneros*, and the tremendous assignment thrust upon them was described later by the Secretariat of Public Education as follows:

The first task entrusted to the missioners was that of visiting the rural Indian centres of the Republic, of submitting reports regarding the educational condition of the Indians, of intensifying their campaign against illiteracy, and of concentrating rural teachers in zones where the density of Indian population was the greatest. The missioners were charged with the task of recommending the type of education which should be made available to native groups, of observing their economic condition, of selecting rural teachers, of studying native industries and the ways of encouraging them; moreover, [they were charged with] organizing a

established in the Secretariat of Public Education. Each mission was assigned to a region, usually consisting of one or more states, where it traveled through the rural areas holding institutes of about eight weeks' duration in specified centers. They were frequently referred to as *normales ambulantes* ("traveling normal schools"). Their objective was twofold: (1) the cultural and professional improvement of teachers in service and (2) the economic and social improvement of the communities. The usual procedure was to select a rural school as headquarters for the eight weeks' period. The first ten to fifteen days were spent getting acquainted with the social and economic conditions of the area and in arousing the interest and co-operation of the local inhabitants in the program. Following this exploratory period, all rural schools in the surrounding area were closed, and the rural teachers took their beds and food and congregated at the temporary mission headquarters for a period of four to six weeks' duration. The missionaries' time was divided between instructing teachers and promoting community projects. Both the community and the local school were used as laboratories for the work. At the end of the period, which usually culminated in a big fiesta, the teachers went back to their schools, and the missionaries moved to a new center.

Beginning in 1933, and intermittently thereafter, there was considerable criticism of the missions. It was argued that they did not remain in any one locality long enough to bring about a change in the customs or habits of the people; that, within a few weeks after the missionaries left, the villagers drifted back into the same old customary grooves. It was said that the training period was too short to be of great benefit to the teachers. As a response to this criticism, the missions were made stationary for a short time and were attached to agricultural schools. The anticipated results were not attained, however, and they were again converted into traveling missions.

During the middle thirties further criticism arose to the effect that some of the missions were being used as devices for spreading communistic propaganda rather than for improving rural conditions. In 1938 the missions were closed entirely, and they were not opened again until January, 1942, when they were completely reorganized, and their purpose was shifted to one of adult education and community improvement.⁸ Regardless of the defects of the early cultural missions, they undoubtedly served an important function during the transition period while teacher-training institutions were being or-

8. The succeeding chapter is devoted to these new missions.

ganized and developed.⁹ Even though they could give only a minimum of in-service training to only a small proportion of the rural teachers, it must be admitted that under the existing circumstances even so small an amount of training would be infinitely better than none.

THE RURAL NORMAL SCHOOLS

The rural-school program was initiated by the cultural missionaries largely on an experimental basis. They went into the isolated communities, not knowing what they wanted to teach or how to teach it. They were called into Mexico City occasionally and there, in conference, pooled their experiences to develop objectives based on first-hand knowledge of the needs of the communities. Not until these objectives were developed was any special attention given to the training of teachers. The fundamental qualifications for a teacher during this early period were enthusiasm and willingness to serve.

The first rural normal school was organized in 1922 at Tacámbaro in the state of Michoacán. From then until 1926 only two others were established. This was a period of uncertainty for the schools, since no official curriculum had been set up; each school floundered about, not knowing just what type of training to emphasize. In 1928 four more schools were organized, and a curriculum was set up, designed to give prospective teachers the following preparation: (1) the academic training necessary to prepare them for the work of incorporating socially and culturally retarded rural population groups into the life of the nation; (2) the professional training required to prepare them for the task of teaching in rural communities; and (3) the practical training in agriculture, the raising of animals, and rural trades and crafts, so that they might be prepared to promote effectively the economic development of small communities.

In 1944 there were nineteen rural normal schools distributed throughout the country on a regional basis. The curriculum of these schools has always emphasized practical agriculture. The schools are located in the country districts and are provided with farm land and livestock for teaching purposes. Most of the students come from peasant families and are supported by means of federal scholarships. They live at the school, where food and sleeping quarters are provided, and they do nearly all the work involved in raising the crops, tending the livestock, and caring for the buildings and grounds.

9. Actually, even the present rural missions are performing a valuable in-service training for teachers, although this is no longer their major objective.

order to be admitted to a normal school a student is supposed to have completed an elementary-school education of six years; but, since not more than four grades are usually found in the elementary schools of the rural districts, the normal schools offer a two-year preparatory course corresponding to the curriculum of Grades V and VI of the primary schools. Twelve years is the minimum age at which students may enter the schools, although officials of the Secretariat of Public Education claim that the average student is several years older than this when he enters.

The normal-school training, apart from the preparatory course, extends over a period of four years. This means that if a student enters at the minimum age and does not have to take the preparatory course, he may finish when he is fifteen or sixteen years of age and may enter the profession as a fully certified teacher.

Each normal school carries on what is referred to as a "social action" program in addition to the regular curriculum. This program consists of organized efforts on the part of teachers and students to improve social and economic conditions of the peasants and the other rural inhabitants living within a radius of 15-30 kilometers of the school. It is a variety of extension work and is designed to train the students for leadership in helping to raise the levels of living in the communities into which they will afterward go to teach.

Until 1942 the rural normal schools were all coeducational. Despite the aversion to coeducation in Mexico, it has generally been argued that, since many of the rural teachers of both sexes would be working side by side later in the same schools, it would be well to train them coeducationally. Nevertheless, when the National Congress of Education met in Mexico City in January, 1943, it went on record as being opposed to coeducation. The rural normal schools were reorganized accordingly. Nine of the larger schools having the more adequate facilities for teaching agriculture were reserved for men, while nine of the smaller schools with the fewest agricultural facilities were designated for women. One school located in Lower California, and hence isolated from the Mexican mainland, has thus far remained coeducational. In 1944, the nine schools for men had an average enrolment of 266 students, while the nine schools for women had an average enrolment of only 100.

Naturally, the shift from coeducational institutions to unisexual schools resulted in some revamping of curriculum and equipment. It is assumed that most of the professional curriculum will remain the same for both types of schools but that practical agriculture will re-

ceive greater relative stress in the boys' schools, while homemaking will be emphasized in the girls' schools.

Most of these rural normal schools are very poorly equipped for the job they are trying to do. This was pointed out by the Minister of Education, Jaime Torres Bodet:

... I feel an obligation to indicate to you one of the most serious problems that confronts us at the present time: That of the 19 normal schools scattered throughout the Republic. Their condition is pitiful. The students have no clothing. The book shelves do not contain any books. And why speak of laboratories or workshops, when in many instances we have not even been able to provide farm implements or even farm animals with which the students might work. A complete renovation of these schools is necessary; a renovation that will be costly, but which it would be ridiculous to postpone. If we want the rural teacher to play a decisive role in the emancipation of Mexico, we must carefully supervise the institutions which are designed to prepare him for the task. . . .¹⁰

The Secretariat of Public Education, as implied in the foregoing quotation, is taking steps to remedy the inadequacy of these schools, but this will require time and careful planning.

The total enrolment in these schools for the year 1942 was 3,803, of which 72.8 per cent were men. Of the 628 who graduated from the schools in 1942, 73.7 per cent were men.

Among the rural teachers of Mexico the proportion of men is much lower than it is in the normal schools. Nearly half the rural teachers are women. Data tabulated from the files of the Secretariat of Public Education for a sample of 8,382 rural teachers holding positions in twenty-two states showed that 54.6 per cent were males and 45.4 per cent were females.

No training certificate is required as yet for teaching in the rural schools, and, although there is a tendency to shy away from hiring anyone with only a primary-school education, persons are frequently employed who have had but one or two years of training beyond the elementary grades. Mexican educators hope that it will not be long before all rural teachers will have the training at least equivalent to that now provided by the rural normal schools; but this is far from realization at the present moment. For the purpose of ascertaining the amount of training received by incumbent rural teachers in 1942, the author checked through the records on file in the Secretariat of Public Education for 4,527 rural teachers in eleven states of the Republic. Of this number, 42.6 per cent had never gone beyond the six grades of

¹⁰ Jaime Torres Bodet, *Educación nacional: desarrollo, enseñanza, maestros* (Mexico City, 1944), pp. 31, 32.

the primary school; only 21.8 per cent had graduated from normal schools. The remaining 35.6 per cent had taken some training beyond the primary grades but not enough to receive a normal-school certificate.

Education officials claim that a great many of the incumbent teachers who have received only primary-school training were employed during the period when training schools were not available and when enthusiasm and willingness to serve were the principal criteria for selecting them. According to government civil service laws, these people have tenure and cannot be replaced by more adequately trained individuals, even if such were to become available, unless and until legislation is enacted which would make a teaching certificate a prerequisite to holding a teaching position. Such legislation is not yet forthcoming, probably owing in part to the lack of sufficient teacher-training institutions to supply the needs for teachers and in part to the reluctance of trained teachers to accept positions in the isolated and culturally backward communities.

Efforts are being made to improve the training of in-service teachers. In March, 1945, there was inaugurated in Mexico City the Federal Institute of Teacher Training (Instituto Federal de Capacitación del Magisterio). The purpose of this institute is to give in-service training to the many teachers who are practicing the teaching profession without any official certification. The minister of education recently announced that, of 17,000 elementary-school teachers without any teaching certificates, 2,705 had now completed the first-year normal course and 2,709 more would finish the first year in August, 1946. He said that many of these would then begin on the second year's work.¹¹

The relatively low salary scale for rural teachers is a barrier to the securing of well-trained teachers. Salaries in the rural schools that were federally supported in 1944 usually ranged from 80 to 100 pesos per month (\$16-\$20), while those in state and municipal schools were usually lower still.

THE ELEMENTARY SCHOOLS

The Mexican school laws make attendance at primary schools compulsory for all children in the Republic between the ages of six and fourteen inclusive. The law with reference to this particular point reads as follows:

11. *Hispano americano*, September 20, 1946, p. 49.

Elementary education will be given to all the children of the country, from six to fourteen years of age, with the exception of the mentally deficient, the sick, the abnormal or those with specific needs, to whom, as well as to illiterate adults, a special type of education with the same objectives as the elementary will be given.

Elementary education is obligatory for all the inhabitants of the Republic under fifteen years of age. The obligation is fulfilled through enrollment in the elementary schools of the State or in private schools duly authorized.

The parents or guardians of children under fifteen years of age have the duty to require such children under their custody to attend State schools or authorized private schools, and obtain an elementary education. The neglect of this duty will incur a fine of from one to five hundred pesos.¹²

In the author's opinion, however, these laws should be interpreted more as statements of ideals than as statements of actualities. Although rapid strides have been made recently in the establishment of schools, Mexican educational facilities have not as yet developed to the extent that such laws could be enforced. The standard course of instruction in the elementary schools involves six grades, arranged in such a manner that one grade may be completed each year. Any schooling facilities beyond the elementary which are rare in the rural districts, although the *Secundaria*, or secondary school, which comprises a three-year course of instruction beyond the elementary six grades, is quite common in the cities. Hundreds of small communities still lack any schooling facilities whatsoever, and in the more remote districts most of the communities offer no more than two years of schooling. Hence at the present time the majority of the children between the ages of six and fourteen in Mexico do attend the elementary school, when they are compelled to repeat the same grades over and over. This situation will become obvious as the data are presented in the successive pages.

minimum of essentials be taught in all elementary schools, of whatever type, but that each type be oriented toward the particular physical, social, and economic environment with which it is surrounded.¹³ Therefore, although the rural schools contain the same basic subjects as the urban schools, an attempt is made to orient them toward agriculture and toward the rural environment. All rural schools located on

TABLE 82
NUMBER OF ELEMENTARY SCHOOLS IN MEXICO AND TOTAL ENROL-
MENT BY TYPE OF SCHOOL, 1942*

Type of School	No. of Schools	Percentage of Total No. of Schools	No. of Pupils Enrolled	Percentage of Total Enrolment
Total.....	18,460†	100.0	2,154,368	100.0
Public.....	16,156	87.5	1,825,176	84.7
Federal.....	10,817	58.6	1,128,327	52.4
State and municipal.....	5,339	28.9	696,849	32.3
Private.....	1,077	5.8	167,281	7.8
Article 123.....	538	2.9	69,315	3.2
Private initiative.....	539	2.9	97,966	4.5
Mixed.....	1,236	6.7	161,911	7.5
Urban.....	3,891	21.1	1,142,428	53.0
Public.....	2,777	15.0	884,782	41.1
Federal.....	904	5.2	404,052	18.8
State and municipal.....	1,813	9.8	480,730	22.3
Private.....	738	4.0	146,335	6.8
Article 123.....	209	1.1	48,566	2.3
Private initiative.....	529	2.9	97,769	4.5
Mixed.....	376	2.0	111,311	5.2
Rural.....	14,578	78.9	1,011,940	47.0
Public.....	13,379	72.4	940,394	43.7
Federal.....	9,853	53.3	724,275	33.6
State and municipal.....	3,526	19.1	216,119	10.0
Private.....	339	1.8	20,946	1.0
Article 123.....	329	1.8	20,749	1.0
Private initiative.....	10	0.1	197	.....
Mixed.....	860	4.7	50,600	2.3

* Data from Dirección General de Estadística.

† By 1947 the number of elementary schools had increased to more than 20,000. In his report to congress on September 1, 1947, President Alemán stated that 12,419 federal primary schools were in operation with an enrolment of 935,000 pupils.

ejidos have at their disposal a plot of ground known as the school *parcela*.¹⁴ In some cases this is tilled co-operatively by the adults of the community, and the proceeds are used for the support of the school

13. *Ley orgánica de la educación pública*, Art. 61.

14. This is usually a plot of crop land the same size as that given to each ejidatario (see chap. vii).

(see Pl. VIII). In a few instances the plots are used for demonstration purposes in the teaching of agricultural techniques. This use would seem to offer an important opportunity for developing a sound program of agricultural education. Unfortunately, efficient use of these plots has not yet been achieved in many of the schools.

The private schools are of two general types—those supported in accordance with Article 123 of the Mexican Constitution and those resulting from private initiative. The schools of Article 123 are located mostly in fairly small communities and are supported by employers for the benefit of the children of their employees. Article 123, which requires the establishment of such schools, is summarized as follows:

Employers engaged in agricultural, industrial, mining or any other type of enterprise, whose establishments are located more than three kilometers away from the nearest town, are required to establish and support elementary schools for the benefit of the community in which they are established, provided the number of children of elementary school age be greater than twenty.¹⁵

Although these schools are supported financially by employers, they are under the technical and administrative supervision of the federal Department of Public Education and use the same plans and methods of study as public schools situated in similar environments.

The schools of private initiative are located mostly in the cities. Only 10 such schools are found in rural areas, while there are 526 in the cities. Some of these are English, American, or French schools or schools conducted by other foreign nationality groups. All are legally under the general supervision of the federal Department of Public Education.

The total enrolment in the elementary schools in 1942 was 2,157,368. Although the enrolment has increased considerably in recent years, it is still very far from including all children of school age in the Republic. Perhaps the best measure of this is to compare the total number of children of school age 6 to fourteen years of age, as recorded in the population census of 1941 with the total enrolment in the elementary schools in the following year.¹⁶ This comparison indicates that only 45.3 per cent of the number of children of school age in 1940 were enrolled in schools the next year.¹⁷

15. *Ley orgánica de la educación pública*, art. 37.

16. This would seem to be more favorable to the schools than is the 1940 enrolment figures, since in 1940 many of the recently turned 15-year-olds were in the census would not yet have reached school.

17. In the United States 70.7 per cent of the children six to fifteen years of age were enrolled in schools in 1941.

In looking for reasons to explain this comparatively low enrolment in relation to available children of school age, one should take into account the following facts:

1. Schools are completely lacking in many of the smaller communities. It is impossible to say how many such communities there are or what proportion of the population they represent. The governmental agencies accept no responsibility for placing schools in communities where there are less than twenty children available; and, since the law does not require private schools of the Article 123 type to be placed in such communities, it is reasonably safe to assume that the population living in communities having less than twenty children of school age are without schools. Some of these children would undoubtedly attend school in neighboring communities, although the proportion who would do this is probably small, since transportation facilities are poor and most of them would have to walk to the neighboring communities. There are also many communities which do qualify for schools according to the law but which do not have them because of inadequate funds with which to support them. The federal Department of Public Education is constantly closing old schools and opening new ones in order to accommodate the greatest number of pupils. The author recently visited an isolated community within a few miles of the city of Puebla, where, according to local residents, there has been no school since 1910. This community has a population of several hundred inhabitants.

2. A second reason for the small enrolment is that many schools offer only one, two, or three years of schooling; the maximum period of exposure to the formal schooling process is therefore very brief for each child. Data on this point are available only for a sample of the rural federal schools. Special tabulations for a total of 3,011 rural schools distributed in eleven states in 1941 indicates that 28.4 per cent of all schools did not offer more than two grades, while 63.5 per cent did not offer more than three; and 93.1 per cent did not go beyond four grades. Only 2.9 per cent of the schools in the sample offered as much as six years of schooling.

3. A third reason for the small total enrolment is to be sought in the fact that, regardless of the number of grades available, a large proportion of pupils who do attend are found in the first grade. A comparatively small proportion advance to the second or third grade and beyond. Half of all pupils enrolled in the elementary schools of Mexico in 1942 were in the first grade, 21.3 per cent were in the second grade,

and only 13.1 per cent were in the third grade (Fig. 34). In other words, 71.3 per cent of all elementary pupils in the nation were enrolled in the first two grades; and the proportion found in the first four grades was equal to 92.2 per cent of the total elementary-school enrolment. As for the rural schools, nearly two-thirds (64.5 per cent) of all pupils were only in the first grade, while 86 per cent were in the first two grades (Appen. A, Tables 39, 40, 41). It would seem, therefore, that one of the serious problems of the rural school is to get its pupils beyond the first grade.

PROPORTION OF TOTAL ENROLLMENT IN
THE ELEMENTARY SCHOOLS OF MEXICO
FOUND IN THE VARIOUS GRADES INDICATED

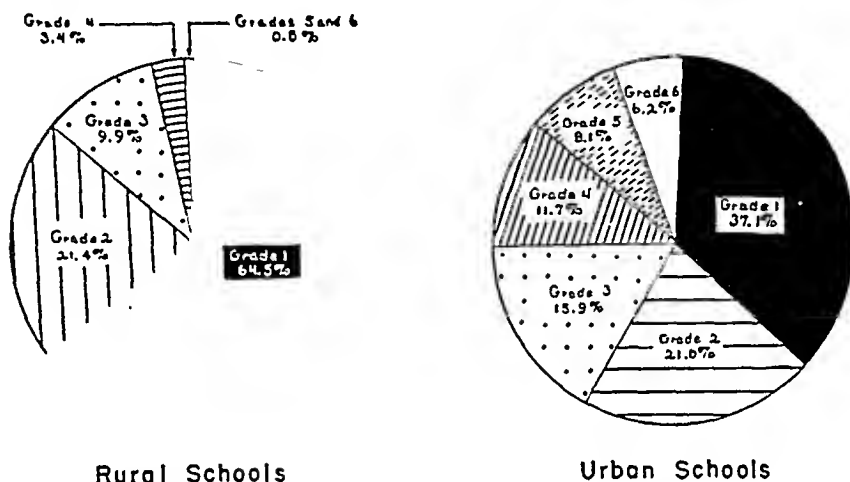


FIG. 34.—Percentage of total enrolment in elementary schools of Mexico found in various grades indicated for rural and urban schools. Based on Appendix A, Tables 40 and 41.

The extent of school retardation which the foregoing implies is emphasized by information relating to the average attendance and number of promotions (Table 83). For all schools, the average attendance is stated as 71.5 per cent. In order to appreciate the significance of this figure, we may assume for the moment that absences from school are distributed equally among all the pupils. If this were the case, it would mean that every student was absent about three days out of every ten. One might expect that such irregularity of attendance would be reflected in the promotions from one grade to another—and this is exactly what happens. Only 57.4 per cent of the pupils attending the elementary schools in 1942 were promoted at the end of the year to the succeeding grades; 42.6 per cent were retained in the same grades

for the following year. In the rural schools only 53.3 per cent of the pupils were promoted, while 46.7 per cent remained in the same grades for the succeeding year.

ILLITERACY

Perhaps the most readily available test of the adequacy and effectiveness of the elementary-school program is the degree of illiteracy which now prevails. Admittedly, illiteracy is a very elementary and

TABLE 83

TOTAL ENROLMENT, AVERAGE ATTENDANCE, AND NUMBER OF PROMOTIONS IN THE ELEMENTARY SCHOOLS OF MEXICO, ACCORDING TO TYPE OF SCHOOL, 1942*

Type of School	Total Enrolment (1)	Average Attendance (2)	Percentage Col. 2 Is of Col. 1 (3)	No. Promoted (4)	Percentage Col. 4 Is of Col. 1 (5)
Total	2,154,368	1,540,225	71.5	1,236,871	57.4
Public	1,825,176	1,299,343	71.2	1,037,384	56.8
Federal	1,128,327	809,320	71.7	629,398	55.8
State and municipal	696,849	490,023	70.3	407,986	58.5
Private	167,231	126,730	75.8	112,298	67.1
Article 123	69,315	48,868	70.5	38,378	55.4
Private Initiative	97,966	77,862	79.5	73,920	75.5
Mixed	161,911	114,152	70.5	87,189	53.8
Urban	1,142,428	833,087	72.9	697,199	61.0
Public	884,782	641,325	72.5	532,975	60.2
Federal	404,052	299,929	74.2	243,969	60.4
State and municipal	480,730	341,396	71.0	289,006	60.1
Private	146,335	114,186	78.0	102,264	69.9
Article 123	48,566	36,506	75.2	28,467	58.6
Private Initiative	97,769	77,680	79.5	73,797	75.5
Mixed	111,311	77,576	69.7	61,960	55.7
Rural	1,011,940	707,138	69.9	539,672	53.3
Public	940,394	658,018	70.0	504,409	53.6
Federal	724,275	509,391	70.3	385,429	53.2
State and municipal	216,119	148,627	68.8	118,980	55.1
Private	20,946	12,544	59.9	10,034	47.9
Article 123	20,749	12,302	59.6	9,911	47.8
Private Initiative	197	182	92.4	123	62.4
Mixed	50,600	36,576	72.3	25,229	49.9

* Data from Dirección General de Estadística.

crude measure of educational attainment, since presumably a person might learn the bare essentials of reading and writing without learning much else in the meantime; and, unless the education program is far reaching enough to alter the social and economic environment so that effective use can be made of one's "literacy" in his local community, the literate person will have very little advantage over the illiterate. In other words, unless books, magazines, newspapers, and other

forms of the written word find a place of usefulness in the community, there will be little gained from learning to read or write.

Although mere "literacy" as such may not indicate very much, widespread "illiteracy" in a modern country may indicate cultural backwardness and may be a serious obstacle to the development of any programs on a national or state level that would require making contacts with the population other than by word of mouth. It is difficult to see how democracy could possibly function effectively on a national level among an illiterate population, since the latter would not be able to ascertain, except through hearsay, the nature of its rights, privileges, and responsibilities under the law. People would be swayed in their thinking by the clever orator rather than by sound analysis of a given program; they would receive only such information regarding issues as politicians chose to tell them. It is difficult to see how such a people could insist upon their rights because they probably would not know what they were.

Judged by the amount of illiteracy that is still prevalent in Mexico, the educational program is far from adequate despite the heroic efforts that have been made. According to the census of 1940, approximately half the total population ten years of age and over (51.6 per cent) can neither read nor write (Table 84).¹⁸ By regions, the variation was from 38.8 per cent in the north Pacific to 73.8 per cent in the south Pacific. In the four states of Querétaro, Chiapas, Guerrero, and Oaxaca, more than 70 per cent of the population was illiterate in 1940.

The amount of illiteracy varies from one part of the country to another. The variation is indicated according to minor civil divisions for the entire Republic on the map in Figure 35. The northern border states show a much lower proportion of illiteracy in relation to the rest of the country, and illiteracy increases as one goes southward. In most of the areas of the southern states of Guerrero, Oaxaca, and Chiapas more than 70 per cent of the population is illiterate. In the Republic as a whole there are 546 municipalities in which the proportion of illiteracy exceeds 70 per cent. These geographic differences in the amount of illiteracy are closely related to differences in the standards of living of the people, as is evident from a comparison of the illiteracy map with Figure 30. These relationships were discussed in chapter xv.

Illiteracy also varies according to the size of the community (Table

18. This percentage has undoubtedly been reduced considerably since 1940 through the campaign waged against illiteracy by the Mexican government. This will be referred to later in this chapter. Illiteracy in this chapter has reference to the proportion of persons ten years of age and over who can neither read nor write.

TABLE 84

PERCENTAGE OF TOTAL POPULATION OF MEXICO TEN YEARS OF AGE AND OVER WHO
CAN NEITHER READ NOR WRITE, BY REGIONS AND STATES AND
BY SIZE OF COMMUNITY*

REGION AND STATE	PERCENTAGE OF ILLITERACY			
	Total Mexico	Size of Community		
		Localities of over 10,000 Inhabitants	Localities of 10,000 or Less Inhabitants	Municipalities Containing No Urban Population
North Pacific.....	38.8	16.6	43.7	46.5
Baja California N.....	14.5	9.1	19.0	†
Baja California S.....	30.6	22.3	32.7	38.0
Nayarit.....	45.0	25.7	48.0	53.4
Sinaloa.....	46.7	17.9	51.7	57.6
Sonora.....	31.1	14.5	35.1	32.3
North.....	39.5	18.5	46.5	49.2
Coahuila.....	31.1	20.2	37.6	33.0
Chihuahua.....	31.8	14.6	37.9	43.8
Durango.....	42.7	20.6	46.0	52.5
Nuevo León.....	26.9	14.4	34.0	34.0
San Luis Potosí.....	59.7	25.7	65.7	69.3
Tamaulipas.....	29.2	17.4	37.2	39.6
Zacatecas.....	50.8	28.4	52.9	54.7
Central.....	51.3	21.1	64.2	67.8
Aguascalientes.....	37.0	22.2	53.6	52.8
Distrito Federal.....	18.1	16.0	36.8	40.5
Guanajuato.....	64.5	40.4	71.8	77.1
Hidalgo.....	67.5	29.6	72.1	74.3
Jalisco.....	45.6	23.5	53.0	53.0
México.....	63.1	22.1	64.9	68.3
Michoacán.....	63.4	31.9	67.1	68.7
Morelos.....	47.9	21.4	50.3	51.6
Puebla.....	62.9	24.5	69.1	72.4
Querétaro.....	71.6	34.1	78.1	77.5
Tlaxcala.....	53.2	†	53.2	51.2
Gulf.....	54.2	19.5	62.2	67.4
Campeche.....	43.2	18.5	52.3	54.1
Quintana Roo.....	38.3	†	38.3	49.2
Tabasco.....	58.0	24.8	61.7	61.8
Veracruz.....	58.2	22.6	65.7	70.1
Yucatán.....	40.4	11.5	51.5	61.1
South Pacific.....	73.8	35.1	75.9	79.1
Colima.....	34.9	21.7	40.7	42.9
Chiapas.....	74.4	33.7	77.5	81.1
Guerrero.....	75.2	34.4	75.9	80.7
Oaxaca.....	75.4	43.7	76.8	78.4
Total.....	51.6	20.6	61.1	65.9

* Data compiled from *Sexto censo de población* (1940) (Dirección General de Estadística).

† There are no municipalities containing no urban population in Baja California N.

‡ There are no localities of over 10,000 inhabitants in Tlaxcala and Quintana Roo.

ILLITERACY IN MEXICO - 1940 (BY MUNICIPALITIES)

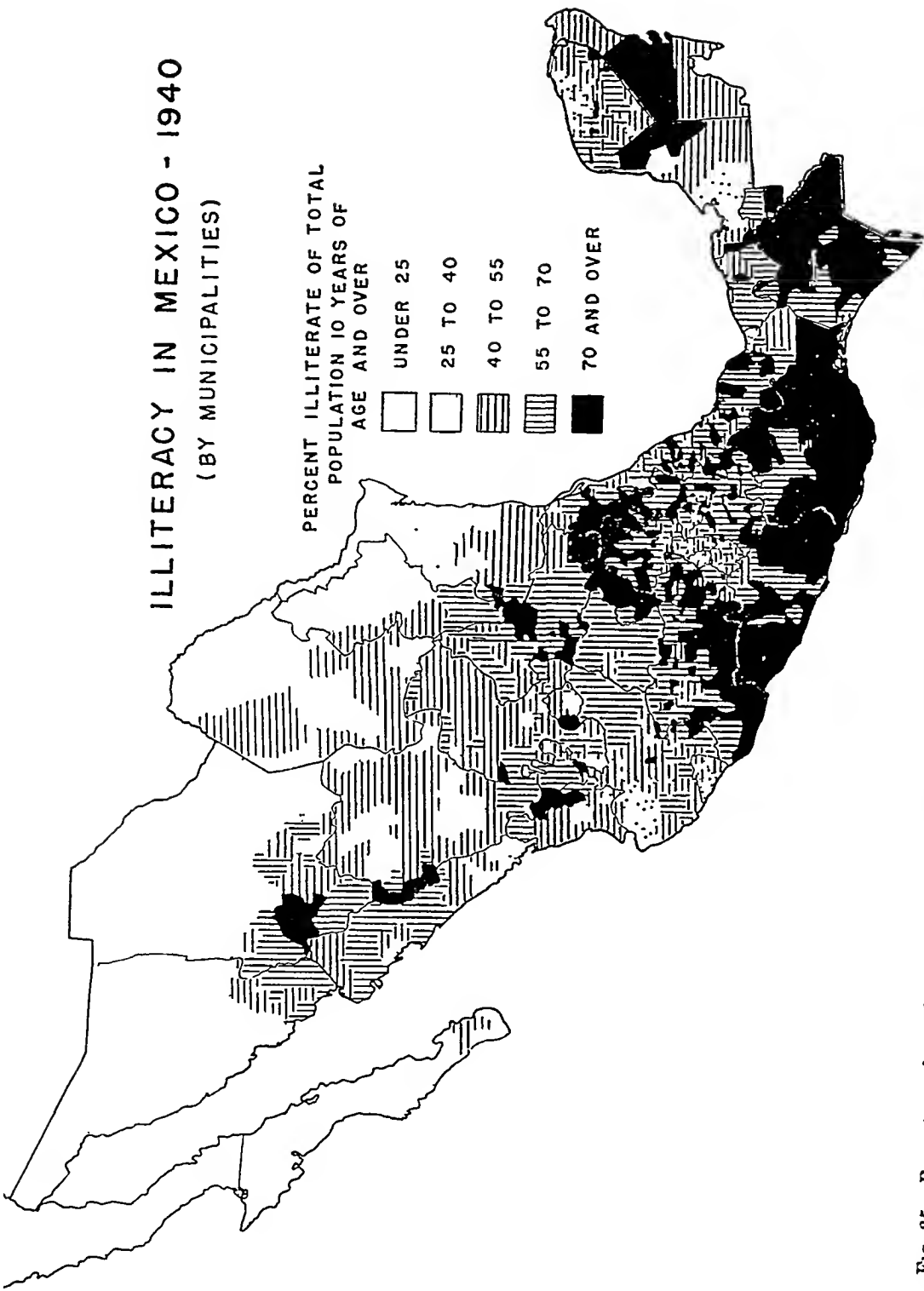
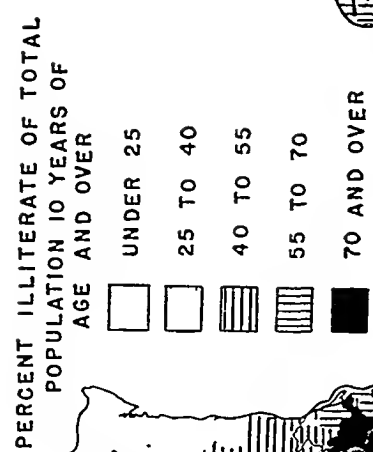


FIG. 35.—Percentage of population ten years of age and over that can neither read nor write, by minor civil divisions. Compare with Fig. 30.

84). In cities of more than 10,000 inhabitants, illiteracy is only 20.6 per cent. In localities with 10,000 inhabitants or less, the percentage is 61.1, while in the municipalities which contain no urban population the percentage is 65.9. These rural-urban differences hold true for nearly every state in the Republic. In almost every case illiteracy is highest in the municipalities which have no urban population and lowest in the cities with more than 10,000 inhabitants.

Finally, illiteracy varies according to age groups. When the inhabitants are classified into three groups according to age, as in Table 85,

TABLE 85
POPULATION OF MEXICO TEN YEARS OF AGE AND OVER WHO CAN NEITHER
READ NOR WRITE, BY AGE GROUPS AND BY SIZE OF COMMUNITY*

AGE GROUP	ILLITERATE POPULATION					
	Total Mexico		Size of Community			
			Localities of over 10,000 Inhabitants		Localities of 10,000 or Less Inhabitants	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
10-14.....	1,227,126	51.1	75,568	15.5	1,151,558	60.1
15-30.....	3,813,577	48.7	340,229	18.0	3,473,348	58.5
40 and over.....	2,155,040	57.8	259,613	28.7	1,895,397	67.2
Age unknown.....	3,013	63.6	551	38.2	2,459	74.0
Total.....	7,198,756	51.6	675,991	20.6	6,522,762	61.1

* Data compiled from *Sexto censo de población (1940)* (Dirección General de Estadística).

TABLE 86
PERCENTAGE OF TOTAL POPULATION OF MEXICO TEN YEARS OF AGE
AND OVER UNABLE TO READ OR WRITE, 1900-1940*

YEAR	TOTAL POPULATION 10 YEARS OF AGE AND OVER	ILLITERATE POPULATION 10 YEARS OF AGE AND OVER		LITERATE POPULATION 10 YEARS OF AGE AND OVER	
		No. of Persons	Per Cent of Total Population	No. of Persons	Per Cent of Total Population
1900.....	9,822,220	7,286,081	74.2	2,536,139	25.8
1910.....	10,809,090	7,537,414	69.7	3,271,676	30.3
1921.....	10,538,622	6,973,855	66.2	3,564,767	33.8
1930.....	11,748,936	6,962,517	59.3	4,786,419	40.7
1940.....	13,960,140	7,198,756	51.6	6,761,384	48.4

* Data compiled from *Sexto censo de población (1940)* (Dirección General de Estadística).

the lowest rate is found in the fifteen-to-thirty-nine age group, where 48.7 per cent are illiterate. The highest rate is found among the group forty years of age and over. The rate is slightly higher for the group ten to fourteen years than for the succeeding age group. This suggests either that some of the children who go to school do not start until they are more than fourteen years of age or that some of those in the age group fifteen to thirty-nine learned to read or write without ever having attended school. Perhaps both assumptions would apply.

Although illiteracy seems high in Mexico at the present time, it is now considerably lower than at any time during Mexico's history. The trend in illiteracy by decades since 1900 is shown in Table 86. Illiteracy is also lower in Mexico at the present time than in many other countries of Latin America. Estimates for some of the other countries are: Argentina, 20 per cent; Uruguay, 20 per cent; Cuba, 22 per cent; Chile, 55 per cent; Brazil, 65 per cent; Ecuador, 75 per cent; Peru, 75 per cent; and Bolivia, 75-80 per cent.

In 1944, President Avila Camacho expressed alarm at the high rate of illiteracy that still existed in Mexico. He branded illiteracy as being responsible for many of Mexico's most serious problems, and he initiated a drive to liquidate it. Said he: "Every country has two kinds of enemies—those without and those within. This latter enemy within Mexico—ignorance—has given rise to grave insufficiencies in our national life—political, economic, and technical evils." He initiated a national campaign against illiteracy by invoking the special wartime emergency powers conferred upon him by the legislature. He issued a decree in the form of a law placing all Mexicans between the ages of eighteen and sixty years who knew how to read and write, and who were not incapacitated, under the obligation of teaching to read and write those persons between the ages of six and forty who were illiterate. Furthermore, the law placed those persons between the ages of six and forty who were illiterate and not attending school under the obligation of accepting the teachings which the law imposed. The campaign was divided into three phases. The first extended to February 28, 1945, and was devoted to organization and to the preparation of teaching materials. The second phase extended for one year from that date and was devoted to the actual teaching. The third phase involved the measuring and the appraisal of results. This was scheduled to end on May 31, 1946. The administration tried to make this a truly national campaign and hoped to reduce illiteracy considerably.

On August 21, 1946, the Secretary of Education, Jaime Torres Bo-

we must admit that it is still much more serious than the illiteracy figures imply. We must remember that conditions are still such in the communities where most Mexicans live that little or no use can be made of their literacy. The following description of the uses of literacy in the village of Chan Kom in the state of Yucatán is probably characteristic of hundreds of other rural communities in Mexico.

Most of the people [in Chan Kom] whom the schools have taught to read and write seldom or never do so. In many cases the literacy means an ability to pronounce Spanish words without much understanding of their meaning. Indeed 16 of the persons reported in the census as literate are also described as not knowing how to speak Spanish. As no instruction is given in reading or writing Maya, this means either that these persons do in fact have some knowledge of Spanish or that—and this is the larger share of the truth—their reading knowledge of Spanish is a superficial ability, an accomplishment, not an instrument of communication.

The actual uses of literacy are so few as to be easily mentioned. The *comisario*, or some other literate man, reads the official communications occasionally sent to the village by the national or the state government, by the *Liga* [a labor organization] or by the Agrarian Commission. One or two men are able to compose replies without the aid of the teacher. Two kinds of books exist and are consulted. One is the church calendar; to this recourse is had when a name is sought for a new-born infant. The other is the booklet of Catholic prayers, in print or in manuscript. . . . There is one man (and probably no other) who owns and occasionally reads a Spanish New Testament. . . . This man has also come very recently to read the Mérida newspaper, which is occasionally sent to Chan Kom for the teacher; sometimes he explains to others of the village items that have interested him.²¹

Although the educators of Mexico are trying conscientiously to adapt the teachings of the schools to the environment in which they are situated, there is still much to be done on this score. Thus Beals writes of the village of Cherán:

With all due acknowledgement of the effort and sincerity involved in the school system, the Cherán schools do not train children in any real sense for life in Cherán. The average Cherán resident completing the school training has little advantage over his unschooled fellows in following the farming routines of the community. If he can read and write he perhaps has some less chance of being swindled in business transactions and more opportunity of rising to some municipal office. If his education is effective, however, and is put to use, it is by moving out of the basic pattern of Cherán. Such a person may become a storekeeper or a mill operator, where his education will be of some slight service to him. The major advantage of school training is to better equip some individuals to cope with the Mestizo world which impinges on Cherán to some extent. Even so, the school child acquires little knowledge of rights and responsibilities in a larger world. Insofar as the education is effective and is utilized—and this is even more

21. Robert Redfield and Alfonso Villa R, *Chan Kom—a Maya Village* (Washington, D.C.: Carnegie Institution of Washington, 1934), p. 17.

markedly true of those going on for more advanced education—the effect is to move the individual out of the culture of Cherán. If he stays in Cherán he tends to become an exploiter rather than a producer, or to occupy a position where he furnishes some liaison between the rest of the population and the Mestizo world. Or, more commonly, he moves out of the Cherán culture completely, residing in some other part of Mexico. Only to a very small extent and in a very limited number of cases does an individual become a better producer, that is, a better farmer; or practice a trade learned through schools; or become a force and example guiding the community to better housing, reformed diets, better health practices, or higher standards of community organization. Formal education is still not geared to the needs and problems of Cherán life and is and will remain relatively ineffective until it becomes of obvious utility to the average Cherán resident. In other words, until the educational process is conceived of first of all from the standpoint of Cherán culture, instead of from the standpoint of national needs or theories, it will not be effective. And when education becomes geared to Cherán needs, paradoxically, it can then be effectively geared to national objectives.²²

Thus the problem of education in rural Mexico is not merely a matter of teaching the fundamentals of reading, writing, and arithmetic. It involves, as well, the teaching of the rudiments of sanitation and sound health practices and elementary but efficient techniques for making a living; the establishing of minimum housing standards that are realizable in a given physical and economic environment; and the development of communication facilities of all types in order that the thousands of isolated and separately distinct little communities may become integrated into the life of the nation so that literacy may be of some use to them.

VOCATIONAL SCHOOLS OF AGRICULTURE

In addition to the elementary schools, Mexico has a number of schools which teach practical agriculture, located in rural areas and originally organized for the purpose of training sons of peasants to become practical farmers. The first of these was established at La Huerta, in the state of Michoacán in 1927. The cost of the buildings and equipment for this school amounted to about 2,000,000 pesos (about \$400,000).²³ Similar schools were later constructed in Durango and Guanajuato. All three of these schools started out with new buildings and equipment. Subsequently schools were established in other states mostly by taking over previously existing buildings and

22. Ralph L. Beals, *Cherán: A Sierra Tarascan Village* (Washington, D.C.: Smithsonian Institution, 1946), pp. 175, 176.

23. Mariano Quiroz, "Agricultural Education in Mexico," *Agriculture in the Americas*, III, No. 10 (October, 1943), 192.

converting them into school plants. Most of these possess very mediocre equipment. Each school has a tract of farm land to be used for teaching purposes and for producing crops enough to defray part of the expenses of the institution. In 1942 seventeen of these schools were distributed in fifteen different states.²⁴

The emphasis is on practical agriculture. To this end the curriculum is so arranged that practice is given in the actual planting and caring for crops and in the raising of livestock. Some emphasis is also given to vocational training in rural industries. The schools carry a three-year program. Students live at the schools and are supported by means of federal scholarships. Preference is given to sons of ejidatarios. Graduation from an elementary school is required for admission, along with an examination in elementary-school subjects and the passing of a satisfactory physical examination. Students usually range between the ages of fourteen and twenty years.

The regular school day consists of eight hours, four hours of which are devoted to instructional work in the classrooms. The remaining four hours each day are devoted to work in the fields, with livestock, in the shops, or in rural industries. Some of the schools offer a fourth year of work for graduates who wish to specialize in some phase of agriculture, such as livestock, dairying, poultry production, or rural industries.

In 1942 the total enrolment in all the 17 schools consisted of 2,196 boys, or an average of 129 per school. Of the total enrolment, 71.5 per cent were sons of ejidatarios and 12.5 per cent were from other farm occupations, making a total of 84 per cent whose fathers were engaged in agriculture. The remaining 16 per cent were from nonfarming occupations.

Of the total enrolment of 2,196, one-fourth failed to complete the year's work. Nearly one-third of the latter group deserted the school without giving any reason for leaving. Another 29.5 per cent were taken out by interested parties, presumably parents or guardians; and 25.7 per cent either moved away from the area or changed schools. The high rate of withdrawals would seem to suggest that either inadequate selection techniques are used in admitting students or that the schools are failing in some measure to give the students what they think they need.

The avowed purpose of these schools originally was to train sons of ejidatarios in practical agriculture so that they could go back to the ejidos and serve as a permanent influence in raising the standards of

24. The states of Michoacán and Puebla each had two schools.

agricultural practices in their respective communities. But the boys do not want to return to their native communities to live. It is claimed that they are very unhappy when they return home because they have acquired new habits of dress, higher standards of living, and are regarded almost as foreigners in their home villages. Furthermore, the boys find that, with no resources at their command, the task of changing the cultural practices of the home folk is almost an impossible one. Hence, if they remain in the local communities, they are faced with the alternative either of going back to their old ways of living or of becoming practically ostracized from the local group. Neither of these alternatives appeals to them, so the majority gravitate to the cities and seek employment in the government service or elsewhere. This has led the government to seek other outlets for them. The most recent plan is to establish agricultural colonies especially designed for graduates of these schools, where they may settle in groups and apply their modern agricultural techniques and their newly acquired ways of living. Land is sold to them at a nominal price with an easy-payment plan, and credit is extended for the purchase of equipment and seeds with which to begin operations. It is too early to tell how successful these colonies will be, since only two had been established in 1945. It is hoped that they will serve as demonstration projects for the peasants living in the surrounding areas and that the latter will tend to copy the superior techniques and practices.

In 1942 there were 537 boys who graduated from the practical schools of agriculture. Information was secured concerning the future plans of 324 of these. Only 5 per cent expected to return to the ejidos. On the other hand, 28.4 per cent expected to go to agricultural colonies; 26.2 per cent expected to carry on advanced studies either at the National School of Agriculture or at the School for Veterinarians; 36.7 per cent expected to continue for a fourth year at the practical schools of agriculture and to specialize in some phase of agriculture; and the remaining 3.7 per cent expected to find employment as school-teachers.

INDIAN SCHOOLS

Prior to December, 1946, Mexico had a department in the federal government known as Departamento de Asuntos Indígenas ("Department of Indian Affairs"). This department was charged with the responsibility of developing programs for the welfare of the more backward Indian groups throughout the nation. As a part of its program, the department organized a number of vocational schools for

Indians in various parts of the country. These were referred to as *centros de capacitación* ("training centers"). The objectives of the schools were summarized by the department as follows: (1) to bring about economic, social, and cultural improvement in the area in which the center is located; (2) to teach vocational agriculture; (3) to give elementary instruction in Spanish, arithmetic, hygiene, civics, history, and geography; and (4) to give instruction in regional trades and crafts.²⁵

These vocational schools are available to Indian youths of both sexes between the ages of twelve and eighteen years inclusive. Admission is open to illiterates or to persons who have completed not more than three years of primary education. The students receive federal scholarships and live at the schools during the entire course of study. The scholarships include board, room, and clothing. The complete course of study requires a period of three years.

There were 23 such schools in the Republic in 1943, with a total enrollment of 2,007. This makes an average of 87 students per school. In 19 of the schools, students were specializing in the vocations shown in the accompanying tabulation.

Vocation	No. of Students
Carpenters.....	335
Blacksmiths and mechanics..	145
Bakers.....	91
Musicians.....	47
Tanners.....	95
Poultrymen.....	27
Masons.....	23
Textile workers.....	69
Saddle-makers.....	72
Turners.....	18
Shoemakers.....	37
Guitar-makers.....	8
Diverse industries.....	25
Agriculturists.....	49
Preserving of fruits and vegetables....	23
Sericulturists.....	34
Preserving of meats.....	23
Soapmaking.....	32
Total.....	1,153

In addition to the vocational schools, the Department of Indian Affairs also has what are referred to as *misiones de mejoramiento* ("improvement missions"). A mission consists of a group of teachers, usually varying from three to ten persons, in various fields related to

25. *Memoria del Departamento de Asuntos Indígenas 1942-1943* (Mexico City, 1943), p. 83.

agriculture, who establish headquarters in a given region and work with the Indian families in the villages of the area in an attempt to improve their agricultural practices and their living conditions. There were twelve such missions in the Republic in 1943. It is difficult to measure their accomplishments, since their efforts are spread rather thinly over the various regions. It was generally felt that the functions of this department overlapped those of other agencies. In December, 1946, President Alemán abolished the department and transferred most of its functions to the Secretariat of Public Education.

AGRICULTURAL COLLEGES

Mexico has three agricultural schools that correspond somewhat to agricultural colleges in the United States. The largest and most important of these is the National School of Agriculture located at Chapingo, about 25 miles from Mexico City. This is a federal school and is under the direction and supervision of the Ministry of Agriculture. Recent improvements have been made in the physical plant, and the equipment is now modern. The school has an enrolment of 400 boys. They are all supported entirely by scholarships from the federal government. Sixty per cent of the enrolment is supposed to come from the farm population, while 40 per cent may be from other occupational groups. The farm boys are selected mostly from the graduates of the vocational schools of agriculture. The most promising boys from these schools are invited to attend a special course, in which they are given preparatory work which they did not get in the vocational schools and which ordinarily would be found only in the secondary schools. After completing this training, committees from the faculty of the National School of Agriculture are sent to interview these boys and to select the more promising ones to receive scholarships. In the past some have also received scholarships as a result of recommendations from prominent politicians.

The course at the National School of Agriculture comprises a curriculum which carries through seven years. The first three years are general in character and the last four tend toward specialization. In addition to the course work, a candidate for a degree must write a satisfactory thesis. The degree of "Ingeniero Agrónomo" ("Agricultural Engineer") is awarded. Usually this degree carries a notation of the field in which the candidate has specialized. The major fields of specialization at the present time are general agriculture, irrigation, forestry, parasitology, and agricultural industries. A committee from the school was recently appointed to prepare a program of

study for the doctoral degree. Graduates from this school have little difficulty in finding employment, since there is a tremendous shortage of trained personnel. Most of them go into government service.

Although the agricultural college is located at a distance of about twenty-five miles from Mexico City, most of the faculty live in the city. They are, for the most part, government workers who hold full-time jobs and teach on the side. This arrangement tends to prevail at most of Mexico's colleges and universities. Ordinarily, teachers are paid so little that a man encounters great difficulty in supporting a family on a teacher's salary. The educational institutions therefore find that they can secure more competent teachers by paying small sums to persons already employed and hence not entirely dependent on a teacher's income. This arrangement offers an advantage to institutions of learning in that the teachers are continuously grappling with life's problems and can bring these directly into the classroom. It has the disadvantage, however, of making teaching merely an adjunct to a teacher's main job. He spends most of his time away from the campus, and the students receive little attention from him except during class recitations. Furthermore, he is not likely to delve so deeply into his subject as he would if it were looked upon as his life's career. It is asserted that his other duties often take him away from his classes and interfere with the systematic preparation of his lectures.

The most important of the other two schools is located at Ciudad Juárez, just across the border from El Paso, Texas. This is a privately financed institution and is considerably smaller than the school at Chapingo. It has an enrolment of about 250 boys. The third school is much smaller and is much less adequately supported than are the other two. It is located near Saltillo in the state of Coahuila.

These agricultural colleges have a most important function to perform in Mexico's social revolution. In order to modernize agricultural techniques and practices, men must be trained to teach the people how to improve their farming and how to conserve the nation's agricultural resources for future generations. The need for trained men is likely to be much greater than these colleges can satisfy for a long time to come.

FEDERAL CONTROL OF RURAL EDUCATION

From data presented in this chapter it is obvious that the rural schools of Mexico are largely a responsibility of the federal government. The secretary of public education holds a cabinet post. Most of the financial support for rural schools comes directly from the federal

government, and most of the teachers, supervisors, and other school authorities are federal employees.

The authority for control of education by the federal government stems from Article 3 of the Mexican Constitution. Until 1946 this article was the source of a great deal of controversy. The church tended to regard it almost as an open invitation to schoolteachers to teach atheism and to denounce the teachings of the church. The article read, in part, as follows:

The education to be imparted by the State shall be socialistic, and, in addition to excluding all religious doctrine, it shall combat fanaticism and prejudice, for which purpose schools shall organize their teachings and activities in such a way that youth may form a rational and exact idea of the universe and social life.

Only the State—Federation, States and Municipalities—may impart primary, secondary and normal education. Private parties who desire to impart education in any of the three aforesaid grades may be granted authorization to do so subject in all cases to the following rules:

I.—The activities and teachings of private schools must in all cases, and without exceptions of any kind, conform to the provisions of the first paragraph of this Article, and shall be entrusted to such persons as, in the opinion of the State, possess sufficient professional training and good morals, and whose ideas are in agreement with this precept. Consequently no religious body, minister of any creed, or civil corporation which exclusively or preferentially engages in educational activities, nor the associations or societies which are directly or indirectly connected with the propagation of any religious creed may in any way intervene in primary, secondary or normal schools, nor may they support them in a financial way.

For years there was widespread controversy over the meaning of the first part of this article. In some cases religious leaders advised parents not to send their children to school for fear they would be taught to become atheists and Communists. In December, 1945, upon recommendation of President Avila Camacho, Congress voted to amend Article 3 in order to remove the more objectionable parts. The amendment has been ratified since that time and it became law in December, 1946. The complete article as amended now reads as follows:

Article 3.—The education to be imparted by the State—Federation, States or Municipalities—shall tend to develop harmoniously all of a person's talents and shall at the same time develop in him a love of his country and the consciousness of international solidarity, in a spirit of independence and justice.

I.—As freedom of thought is guaranteed by Article 24, the course to be followed in such education shall not in any way touch upon any religious doctrine and, based on the results of scientific progress, shall combat ignorance and its effects, oppression, fanaticism and prejudice. Furthermore:

a).—It shall be democratic, considering democracy not only to mean a juridical

structure and a political regime, but a way of life based on the continuous improvement of the economic, cultural and social conditions of the people.

b).—It shall be national inasfar as,—without hostilities or exclusions,—it shall strive for an understanding of our problems, the utilization of our resources, the defense of our political independence, the assurance of our economic independence and the continuity and growth of our culture, and

c).—It shall contribute to the improvement of human relations, not only with regard to the actual teachings imparted to the pupils, together with a realization of personal dignity and family integrity, in order to obtain a consciousness of general social welfare, but also with regard to the care to be taken to foster ideals of the brotherhood and equality of rights of all men, thus avoiding any race, sect, group, sex or individual from exercising undue privileges.

II.—Private institutions may impart education in all grades and of all kinds, but with regard to primary, secondary and normal education (and that of any kind or grade for workers and peasants) they must in every case obtain the prior express authorization of the government. Such authorizations may be granted or refused, and there shall be no recourse whatsoever against those resolutions.

III.—Private educational institutions imparting teaching of the kind and grades specified in the foregoing paragraph must in every case comply with the provisions of the first paragraph and Sub-paragraphs I and II of this Article and, furthermore, must comply with official plans and programs.

IV.—Religious bodies, ministers of any creed, stock companies which, exclusively or principally carry out educational activities and associations or societies for the propaganda for any religious creed, shall have no connection whatsoever with institutions imparting primary, secondary or normal education or education for workers or peasants.

V.—The State may at any time and at its discretion, withdraw its official approval of the studies taught in private institutions.

VI.—Primary education shall be obligatory.

VII.—All education imparted by the State shall be free.

VIII.—In order to unify and coordinate education all over the Republic, the Congress of the Union shall issue the necessary laws in order to distribute the social function of education between the Federation, the States and Municipalities, to specify the economic contributions corresponding to that public service and to establish the penalties applicable to functionaries who do not comply with the legal provisions or do not see that they are complied with, as well as to those who violate those provisions.²⁶

It will be noted that control of education is in the hands of the federal government; that private institutions may impart education but must first obtain express authorization from government officials; and that there is no recourse whatsoever against the decision of the latter.

The arrangement whereby rural education is largely financed and controlled by the federal government has both advantages and disadvantages. On the positive side, the federal government is much better

26. Art. 3, as amended by decree, was published in the *Diario oficial*, December, 1946.

able to finance education than are state and local agencies. In most cases the latter do not have resources with which to support adequate schools. In many rural areas where widespread poverty prevails, there probably would be no schools at all if the federal government did not assume the financial responsibility. National control enables planning of facilities and programs on a national scale and makes possible the setting-up of uniform standards and objectives. It makes it feasible to emphasize such goals as social welfare, international solidarity and love of country. The provision of a plot of land for the use and benefit of each ejido school in the Republic is an example of the type of action that can be taken when there is national control. A national policy could, and does, also strongly advocate the adaptation of the school curriculum to local community needs.

The disadvantages of federal control arise chiefly from the tendency to mix a certain amount of politics with education. The secretary of education, being a cabinet member, is appointed by the president and holds tenure at his pleasure. This means that a new secretary is appointed at least every six years, and sometimes much oftener. Three different secretaries, for example, served under President Avila Camacho. All three held very different philosophies of education, and, quite naturally, each shifted the personnel of the top policy-making positions to conform to his own ideas. If the incoming secretary happens to be more competent than the preceding one, the shift is likely to benefit the whole school program. Sometimes, however, politics has an adverse influence, and a man with little educational experience and few other qualifications for the job is placed in charge of the educational system. When this happens, confusion and uncertainty result, and years of careful planning may be quickly nullified. Although changes among the top officials probably do not affect appreciably the internal functioning of the average rural school, they do affect seriously the continuity of the planning and policies at the national level. How to maintain continuity of effort and objectives in the face of rapidly shifting personnel in the policy-making positions is one of the more serious problems confronting Mexican education today.

Rural Cultural Missions

THE rural cultural missions of Mexico offer an interesting approach to rural community education. The approach which they use and the results which they are accomplishing seem important enough to warrant considerable attention. Their purpose is to improve the economic, social, and cultural conditions of rural communities in some of the more backward areas of Mexico and to shorten the distance which separates the rural inhabitants culturally from the national life.

ORGANIZATION OF THE MISSIONS

Cultural missions had been operating in Mexico from 1923 to 1938, largely as traveling normal schools. This early experience is described briefly in the preceding chapter. The program was discontinued from 1938 to 1942. In February, 1942, they were again organized as the Auxiliary Office of Cultural Missions in the Secretariat of Public Education. In 1943 the office was changed to the Department of Cultural Missions. In 1945 there were 37 rural cultural missions scattered throughout the Republic. In addition to these missions, there were two urban teachers' cultural missions and two workers' cultural missions. These latter missions remain in a given locality only a few weeks at a time and then move on. The rural missions remain in a given locality from one to three years before moving to another area.

The personnel of a rural cultural mission consists of the following: (1) a director, or chief of the mission, who must be a normal-school graduate with at least five years of professional experience and must have ample acquaintance with rural life and its problems; (2) a social worker; (3) a nurse and midwife; (4) a teacher of agriculture; (5) one or more construction teachers; (6) two or more teachers of trades and industries; (7) a teacher of mechanics and operator of motion-picture projector; (8) a teacher of music; and (9) a leader of recreational activities.

These specialists, organized under the director and responsible to the department in Mexico City, constitute a rural cultural mission. Each mission is assigned a definite region within which to operate for a period of one to three years. Usually a large, centrally located village is chosen as the headquarters of the mission, and a dozen or so smaller villages in the immediate vicinity are included in the sphere of operations. In the selection of locations for these missions, preference is given to areas in which economic and cultural retardation is apparent and where geographic and social isolation have precluded assimilation of the inhabitants into the national life. None of the missions can be reached by train and only two or three by car over very poor dirt roads. Some are located in such isolated areas that in order to get to them one must undertake a journey of one or more days on muleback, usually over mountain or jungle trails. About half the missions are working in areas where the inhabitants consist entirely of indigenous groups. The other half are operating in predominantly mestizo communities.

The objectives of the missions as set forth more specifically by the department are as follows: (1) to improve economic conditions in the communities by improving occupational techniques and practices, introducing new crops, stimulating the raising of better livestock, and improving both production and marketing procedures; (2) to improve conditions of health and sanitation; (3) to awaken a desire on the part of the inhabitants to live in better homes, with at least a minimum of desirable household equipment for the enjoyment of a satisfactory domestic life; (4) to stimulate improvement in diet and dress; (5) to organize and develop social and recreational activities in the various communities; (6) to stimulate interest in general cultural improvement; (7) to encourage the love of country and to combat all foreign influences which tend to undermine patriotism; and (8) to improve the professional preparation of in-service rural teachers and to help improve the rural schools.

The mission uses the community approach to the solution of rural problems, taking the entire community as its sphere of activity. It makes a frontal attack on all the more pressing everyday problems of living. For the purpose of determining these problems, an investigation is made when the mission first arrives in the new community. This investigation is concerned particularly with economic welfare, health, home life, recreation, and education. From the outset the missioners encourage the participation of the local inhabitants in these investigations as well as in any programs devised for their solution.

Once the fundamental problems have been determined, a "Committee on Economic and Social Action" is organized and is charged with the task of co-ordinating activities for improving the welfare of the community. Usually this committee consists of the leaders of the more important local organizations already in existence. The mission is instructed to co-ordinate its efforts with those of local agencies and to give credit for the successful projects to the co-operating agencies.

The missions are instructed to sponsor only projects that meet the practical, everyday needs of the inhabitants and to carry these on in the homes, the fields, the schools, and the shops where they will fit into the daily routine of the people. Projects involving excessive expense are to be avoided, and the missionaries are instructed to avoid introducing sudden and drastic changes or techniques or methods of work too advanced for the community, since this would cause discouragement on the part of the inhabitants. Rather, the mission is urged to use a gradual and progressive procedure adapted to the local circumstances in each case. Each missionary is assigned a list of duties which he is expected to perform. These cover a wide area of responsibility. Perhaps the best way to comprehend the objectives of the mission is to examine the duties of each missionary as set forth by Guillermo Bonilla y Segura.¹

The Chief of the Mission organizes, coordinates, guides, and supervises projects so that desired results are achieved. He promotes the construction, conservation, and improvement of municipal roads, highways, telephone lines, and post offices. In order to lower living costs he strives to organize cooperative associations for the production of livestock, agricultural and industrial goods, and consumer co-operative groups to distribute basic essentials. He organizes a general supply warehouse that will make available at cost essential working facilities, tools, apparatus, machinery, and raw materials which the people need in their daily work. The establishment of companies for the storage and distribution of finished products is encouraged in order that the best prices may be obtained. Every resource available which might raise the professional standard of rural teachers and improve school facilities is utilized. Cooperative educational centers and institutions for the professional improvement of teachers in his zone are being organized in accordance with instructions issued.

The Social Worker, through tactful work in the homes of the people, encourages family and home industries and the production of agricultural products sufficient for domestic needs. This missionary also works to achieve absolute cleanliness and the extermination of parasites and vermin in homes. She en-

1. *Report on the Cultural Missions in Mexico*, trans. and ed. in the American Republics Section, Division of International Educational Relations, U.S. Office of Education (Washington, D.C., 1945), pp. 7-11. (Guillermo Bonilla y Segura was in charge of the missions from 1942 to 1946.)

courages the use of furniture and utensils, the improvement of the appearance and decoration of homes, and teaches the women how to make wearing apparel, household linens, and baby layettes. Also of concern to the social worker is the best arrangement of the home for health and comfort, utilizing available facilities. She should help to bring about the assignment of domestic duties according to the ability of each member, thus lightening the burdens of the mother and providing time for the care and education of the children. The social worker encourages compliance with the Family Relations Law, advises against premature or very late marriages, and advises concerning the rearing and education of children. The worker assists young girls about to be married to prepare for the responsibilities of home and family life and encourages home recreation for the family through story-telling, reading, games, and songs. Friendly relations between families in the community and community planning for moral welfare of its children are also encouraged. The use of alcohol and other social evils are constantly combatted. The social worker strives to improve the efficiency of homemaking teachers. Young women who show special ability and interest in social work are trained to carry out the duties of the worker after the mission leaves the community. Groups which will care for children and provide food and clothing through consumer cooperatives are organized on a self-sustaining basis.

The Nurse and Midwife must take the steps necessary to insure that drinking water is kept pure, and teach the people how to avoid contracting disease from contaminated water. She also strives to maintain absolute cleanliness in the markets, streets, public buildings, and meeting places; and urges compliance with the laws concerning burials. She nurses the sick, cares for expectant mothers before and during delivery, and teaches the fundamentals of child care. Measures are taken to prevent and control endemics and epidemics; to establish a general health and maternity clinic; and to organize a small pharmaceutical service for the community, using the supplies provided by the Secretariat of Public Education, the Health Department, and by the community itself. She works to improve the effectiveness of rural teachers by giving instruction in nursing, and to train four or five intelligent women as nurses and midwives so that they may continue the operation of the health clinic, thus making it a permanent community service.

The Teacher of Agriculture organizes the farmers to enable them to obtain the best results from their labor, to make contracts for rentals or partnerships that are fair to all concerned, to apply for cooperative farms to which they may be entitled according to law, and to secure the equipment that small property owners need in order to farm profitably. The property system prevailing in the particular community is scrupulously observed. The teacher of agriculture seeks to intervene tactfully in the solution of problems concerning the use and appropriation of irrigation water. . . . He also studies the problem of obtaining irrigation water where none is available. The intelligent cultivation of suitable crops, the improvement of working methods, the rotation of crops, control of plant diseases and pests, and better storage of the harvest are also the concern of this missionary. He organizes farmers to sell their crops to the best advantage, and to secure the benefits to which they are entitled under the Farm Credit Law, thus freeing them from the obligation to pay premiums to money lenders and profiteers. He cooperates with the social worker in educating the rural people to use available

land for gardens and orchards; to breed animals profitably; to construct small chicken coops, pigsties, and apiaries; and to make needed repairs and alterations of their homes. Finally, he contributes to the professional improvement of the rural teachers working in the area by imparting to them essential information concerning agricultural problems.

The Construction Teachers instruct in masonry, including the uses of lime, brick, tile, adobe, and other construction materials; they direct construction of new houses; and guide and assist residents concerning the improvement of their homes. With the cooperation of the communities, they construct bridges, aqueducts, sewers, and other necessary public conveniences. These missionaries participate in the organization and direction of educational centers and institutes for the professional development of teachers.

Teachers of Trades and Industries give instruction in such new enterprises as the preservation of meats, fruits, and vegetables; making of milk products, candy, pastry, and bakery goods; the manufacturing of articles from broom and reed grass; extracting of essences and dyeing materials; tanning, saddle making, and shoemaking; weaving of wool and cotton materials, and the cutting and sewing of clothes; carpentry, ironworking, and other small industries that will supplement home income. They install adequate shops in the schools and instruct teachers in their use. In order to insure that the work will continue, they participate in the organization and direction of centers for study and institutes for the education of teachers.

The Teacher of Mechanics and Operator of Motion Picture Projector helps interested citizens to install corn mills, pumps, hydraulic rams, small hydroelectric plants, and similar equipment; and renders service without charge to rural people who have mechanical problems. He supervises the laying of pipes for drinking water and other sanitary facilities. In addition, he operates a motion picture projector in the communities served by the mission and, whenever possible, photographs interesting aspects of community life, the work of the mission, and the scenic beauties of the region. He cooperates in the organization of festivals, and of civic and social programs, and, like all other members of the staff of the mission, participates in the organization and operation of centers of educational cooperation and conducts institutes for teachers.

The Music Teacher directs music and singing for the boys and girls of the community, instructs teachers in methods of teaching music in their schools, organizes musical groups in every community, assists them in obtaining the necessary instruments, and organizes groups of singers among those who have special abilities. The music teacher cooperates closely with the committee on recreational activities in promoting and organizing festivals and civic and social programs. An important part of his work is to study and collect all types of regional musical compositions, including popular music. He shares in the conducting of the educational centers, and encourages the performance of music and regional songs by conducting contests between communities.

The Leader of Recreational Activities is the promoter of athletic activities within the community, and seeks to encourage everyone to participate in at least one sport that is healthful and recreational. Operating a program of competitive games that will interest the participants and serve as recreation for the entire community is the responsibility of this missionary.

Professor Bonilla attaches particular importance to the necessity for developing wholesome recreational facilities in rural Mexico. He was reared in an isolated village in the state of Puebla and speaks from personal experience. He paints a pessimistic picture of rural life, very different from the romantic accounts flowing from the pens of foreign visitors. It seems advisable to quote him at some length:

Nowhere is life more monotonous, sad, and tiresome than in the country. Only the tourists, poets, or painters who live there for short periods of time can speak of rural life as a thing of beauty. People who live in the country see it in a different light. Eating, working, and sleeping are the only three links in the chain of rural life. Rural people often migrate to the city to avoid boredom and weariness; they find city life less simple, for it has at least one additional link—recreation.

It is not necessary to do research on rural life to come to the conclusion that no social or recreational activities are available there, not even those of the most elementary kind. One need only visit a rural settlement to note that residents do not even observe the custom of visiting each other. Occasionally they meet along the roads and exchange a word of greeting or inquire about the health of relatives. They talk about the weather, and exchange best wishes, but that is the extent of their social relations. Nor is there any kind of social life within the homes. Now and then the members of a family speak of their work or of their neighbors and relate bits of gossip concerning a neighboring ranch. On rare occasions there may be a community dance which usually ends with much shouting and striking of one another with hats. There may be an annual celebration, like a small fair, that lasts 2 or 3 days and commemorates the anniversary of the town. Sundays, as a rule, are particularly monotonous in rural communities. If the custom of marketing is established in a town, it is the only diversion for the people. There are no athletic fields, children's playgrounds, public gardens, or walks which might offer recreation to the residents. Nor are there any theaters, motion picture theaters, libraries, or musical programs. There is not even a convenient place for neighbors to meet casually and talk. Life, as it is lived in small settlements, ranches, and villages is not really living. Life should be happy, beautiful, and inspiring, so that human beings will want to live on to accomplish things in this world. Since the horizon of rural life is so limited and lacking in opportunities, our Department believes it is most urgent for the missions to enrich it, at least to the extent of stimulating social and recreational life. Rural life, which is now mostly an animal-like existence, would thus acquire some spiritual value; the monotony of existence would be broken, even if only temporarily, and sad and painful thoughts would be forgotten. A new feeling of joy would be born within the people and this would lead them to love life and be hopeful. If only for this circumstance, social and recreational life would be worth while. Cultural missions will achieve good results if they firmly resolve to introduce recreation in the ranches, rural villages, and settlements.

When we speak of recreation, we naturally refer to social and recreational activities which are wholesome. Many leisure-time activities are undesirable, such as gatherings in saloons or canteens where intoxicating beverages are sold, and where cock fights, gambling, and similar diversions are practiced. The worst

living conditions in these isolated communities are difficult. Often the families of staff members must be left behind. Only persons with real missionary spirit will accept such positions at the salaries offered. The positions are often filled by persons inadequately trained for the job. Better-trained people can find plenty of jobs in Mexico City or in other large centers. Another serious problem is the limited amount of time available to the mission in any given community. The objectives are so broad and so far reaching that, in many cases, it would require an entire generation to accomplish them. One individual is often assigned duties that would require a dozen trained workers to perform adequately. Such, for example, are the duties of the social worker as previously described. Sometimes it takes about a year to enlist the wholehearted co-operation of the local inhabitants, and by this time the mission is beginning to make plans to move elsewhere. Fortunately, the missions have now adopted a policy of moving only a short distance from the preceding base of operations so that the missionaries may revisit the former communities to give some supervision to the activities of the local apprentices whom they train to carry on after their departure. Officials of the missions realize that the time a mission may remain in a given locality is very limited (from one to three years) in relation to the objectives which they wish to attain, but they are overwhelmed by the needs in other areas. They face the dilemma of having to choose between spreading their efforts thin and reaching a larger group or concentrating their limited resources on a few restricted areas and digging more deeply. Thus far they are choosing the former alternative.

The work of the mission can perhaps best be explained by presenting a concrete case. The greater part of the remainder of this chapter will be devoted, therefore, to a case study of one of the thirty-seven missions in operation in 1944.

THE RURAL CULTURAL MISSION OF SAN PABLO DEL MONTE

San Pablo del Monte³ is the headquarters of the municipality of the same name and is located in the southern part of the state of Tlaxcala at a distance of only 6 miles from the city of Puebla. The municipality has a total population of 8,563 inhabitants, about 85 per cent of whom live in the central village of San Pablo and the rest in smaller surrounding villages. The population is predominantly Indian, descendants of the branch of the Aztec family known as "Nahuatl." The

3. For convenience, hereafter referred to as "San Pablo."

predominance of the Indian element is indicated by the fact that, according to the census of 1940, 89.2 per cent of the inhabitants of the municipality speak Indian languages, and 38 per cent speak nothing but Indian languages. The Department of Cultural Missions acted wisely in sending a man who speaks Nahuatl fluently to be in charge of the mission; otherwise, intimate contacts with the local inhabitants would be difficult, if not impossible, to establish. The widespread use of the Indian language (Nahuatl) in the home and the community and the lack of knowledge of Spanish are serious problems which confront local schoolteachers, who often complain that so much of their time must be directed to teaching the youngsters how to speak Spanish that little remains for anything else. This is probably one reason why the illiteracy rate is so high in the municipality—84.4 per cent of the inhabitants ten years of age and over neither read nor write.

The principal agricultural crop of the region is corn. In some instances rows of beans are interspersed among the corn rows. Aside from these two products little else is grown. There are occasional fruit trees such as apple, apricot, peach, and avocado. These are given little care, however, and they produce little. There is no water available for irrigation and very little for drinking purposes. A few scattered wells have been dug, but these are expensive, since the water level is about 125–75 feet below the surface. Only one well is usually found in each village, and all the neighbors (principally women and children) carry water from it in earthen jars to their homes.

A large part of the economic life of the area is oriented toward the city of Puebla, to which the village of San Pablo is connected by a dirt road. About fifteen hundred women from San Pablo and adjoining villages make tortillas for sale in the city of Puebla. They usually arise at daybreak or earlier and carry their corn to one of the fifteen or twenty small local mills which are operated by electricity. They then return to their homes with the *masa* and kneel on the dirt floor patting out tortillas and cooking them on a *brasero* ("brazier"). This process continues with slight interruptions until any time between 6:00 and 11:00 A.M. Beginning at about six o'clock in the morning, the trek to Puebla begins. Each woman makes the trip with her own basket of tortillas weighing from 25 to 50 pounds and sells them in the market in Puebla. Each pays a small fee to the city market for the privilege of selling. After they are sold, each woman buys enough corn in Puebla for the succeeding day's supply of tortillas and returns to San Pablo and vicinity with the basket of corn to start the process over again. There is bus service every hour during the daytime between

San Pablo and Puebla and probably half the women ride on the buses. The other half walk the entire round trip of 12 miles barefooted, carrying the load on their backs both ways. Since the buses go only as far as the principal village of San Pablo, many of the women must walk several miles to and from the surrounding villages, even though they may take the bus at San Pablo.

A great many of the men from San Pablo and vicinity work in Puebla as unskilled laborers, especially during seasons of the year when they are not working in their fields. Many of them also walk the entire distance both ways, while others ride on the buses. The early-morning and evening buses are usually loaded with as many people as can hang on. Usually a dozen or more persons ride on top. Thus, in a sense, it may be said that San Pablo is a suburb of the city of Puebla. The local inhabitants stream into Puebla each morning, and at the end of the day they stream back again to sleep in San Pablo.

At the time of the author's visits to San Pablo, the political and, to some extent, the economic life was dominated by what the Mexicans term a local *cacique* ("chief" or "boss"). This is not unusual. Many Mexicans regard *caciquismo*—the domination of the political and economic life of the community by one man—as one of Mexico's most serious problems. Others agree with this but hasten to add that little can be done about it until the general cultural level of the inhabitants is raised considerably. The nature of the control which the *cacique* exercises over this community has been described by a responsible official of the federal government as follows:

Regardless of our opinion on the matter, it is a fact worthy of notice that the region has had and still has an authoritarian regime, something akin to patriarchal rule by a *cacique* under whose decisive influence the social and political life of the community develops, and even though municipal authorities act with apparent autonomy, in fact they do nothing that has not been previously suggested, ordered or approved by the *Jefe* [chief] who guides and controls the affairs of the community. It should be understood that I apply the word *Jefe* in the sense in which it is used by the community, that is, a person who by his own merits exercises supreme moral authority within the community and is, besides, benevolent protector of all and each one of the neighbors, promoter of general welfare, counsellor and guide; and, furthermore is the final and definitive authority which is still necessary at the stage of social evolution which prevails in the community. It should be mentioned that this state of things is tolerated and even strengthened by high officials. This should be taken into consideration if one is to act in accordance with reality.

The local *cacique* held a prominent position in the state government and through his political influence was enabled to manipulate

local governmental affairs according to his desires. The municipal officers, although theoretically elected by the people, were said to be actually designated by the cacique. At the time of the author's last visit in 1944, the *presidente municipal* ("municipal president") was a man who could neither read nor write. His signature to public documents consisted of his thumb print. The author was told that, even though it is contrary to both the state and federal laws for an illiterate person to hold the office of *presidente municipal*, the cacique frequently secured the "election" of such persons, partly because they were more easy to control than persons with some education who might wish to exert independent initiative. Furthermore, the author received somewhat of a shock when the individual who was to be the next *presidente municipal* was pointed out to him, even though the election was not scheduled to take place for more than a year. It was said that not only did the cacique virtually appoint the municipal authorities but he told them what decisions to make. Only concerning inconsequential matters did local authorities exercise their own initiative.

The revenue available for the support of the municipality is meager, consisting principally of small fines from lawbreakers, a tax on each of the electric corn mills, a tax on the slaughtering of animals, and a small tax on the few shops that exist. The municipality is not permitted to tax farm land or real estate in general. This privilege is reserved for the federal government. The small amount of revenue available precludes the support by the municipality of such institutions as schools. These must depend on what the federal and state governments see fit to allow.

There is a large Catholic church in San Pablo and a small one in each of the surrounding villages. There is only one priest in the municipality, and he resides at San Pablo but visits each of the other villages. The author made inquiries of the missionaries as well as of other residents of the community as to what encouragement and assistance the priest was giving to the work of the mission. He was informed by all that the priest took no notice of it whatsoever. It was rumored at the beginning that he was warning his parishioners not to have anything to do with it, but the leader of the mission arranged an interview with him and explained the objective of the mission as one of helpfulness to the community and invited the priest to participate. The leader says he has no evidence since then that the priest has spoken a single word in favor of the mission or that he has criticized it.

He has simply ignored its existence.⁴ The opinion was expressed, however, that, if the priest would lend his moral support and encouragement to the project, the work of the mission would be made easy. Local residents appear to be loyal to the church and are supporting it liberally through tithes and offerings out of their meager earnings. The civil authorities participate in church festivals and the *presidente municipal* appoints a *mayordomo*.⁵ This *mayordomo* usually chooses a few collaborators and is responsible for all expenses incurred in providing the fiesta, including, ordinarily, a free dinner accompanied by plenty of pulque for all, music provided by an orchestra or band, and native dances. Often *mayordomos* for different *santos* ("saints") compete with one another in trying to provide the biggest fiesta. Sometimes a *mayordomo* spends most of his life's earnings sponsoring this fiesta and is left almost penniless when it is over; but serving as *mayordomo* is considered to be a great honor, and no one may refuse to accept the responsibility of serving at least once during his lifetime. The author was told that a local custom prevails whereby upon the death of an individual in this municipality who has at some time during his life served in each of the three positions of *presidente municipal*, *síndico* ("judge"), and *mayordomo*, he is honored by having his coffin draped with the national flag at burial. All this seems to indicate that religious and civil affairs are pretty well intertwined and that the local priest is in a position where he could perform a most valuable service to his community by encouraging educational endeavors and by actively supporting projects designed to raise the levels of living. The local inhabitants seem to be of the opinion, however, that the priest shows no interest whatsoever in the material welfare of his parishioners but devotes his time almost exclusively to performing the routine ceremonies. On one occasion when the author visited San Pablo, he found the entire community decked out in colorful array awaiting a religious demonstration which was to be conducted in the plaza the following day. It is contrary to federal law for religious demonstrations to be held outside church buildings, but the author was told that this fiesta is an annual affair and that the governmental authorities do not attempt to interfere.

When the missionaries arrived in San Pablo they received a cool reception. Nobody seemed interested in their plans for helping the community, and many were downright suspicious of their motives.

4. In certain other areas the priests have openly opposed the cultural missions.

5. A *mayordomo* is a person selected to have charge of the annual fiesta in honor of the patron saint of the village (see chap. xix).

Whisperings went around that they were Communists who had come to destroy religion. Many expressed great surprise that the federal Department of Public Education should be so generous as to want to help them improve their homes and living conditions without obligating them in some way. "Surely," they argued, "it is a trick of some sort designed as an excuse for increasing our taxes or of placing us under obligations to pay for the services at some later date." Some admitted the need for help and advice but expressed the belief that it would be better to wait until they could pay for it. Others proceeded calmly to ignore the presence of the missionaries, even to the extent of refusing to speak to them. The first few weeks were spent gloomily and with frequent discussions among the missionaries as to whether it might not be advisable to leave this community and to try to find a more receptive one. Gradually, however, the musician began to win the friendship of a few men and boys who had musical instruments and who liked to play them. It was not long until a small group was gathering around him in the evenings, and the strains from this rudimentary orchestra began attracting other interested bystanders. Once a small circle of friends was established, there was opportunity for the other missionaries to make suggestions to sympathetic listeners. The leader of the mission visited the state governor and got his indorsement of the project; this facilitated co-operation from the *presidente municipal* and other local authorities. The local schoolteachers proved to be a valuable source of contact with the community, and many of the children soon began to rally around the recreation specialist who was teaching them various types of games. Within a couple of months some of the prejudice was broken down, and they could really begin to work in earnest.

CO-OPERATIVES

One of the first proposals of the mission was to organize all the tortilla-makers into a large co-operative. It was suggested that one or more mills could be purchased co-operatively for grinding the corn; that machines could be acquired for making the tortillas mechanically, that a station wagon or two could be purchased for the exclusive use of the co-operative in hauling the tortillas to Puebla and bringing back the corn, and that stands for selling the tortillas could be erected at convenient locations in Puebla with permanent salesmen stationed there to dispose of the product. This scheme would obviate the necessity for all the fifteen hundred women to make a trip and sell the product individually. The director of the mission

talked the proposition over with responsible state authorities, who, in turn, advised him to consult the cacique, since such a scheme might interfere with the latter's established business. Vested interests prevented the formation of the co-operative. The cacique threatened to fight the proposal to the bitter end. It is said that he has a monopoly on transportation and owns the buses which run between San Pablo and Puebla and which now carry full loads. He charges a fee for each person and each basket each way. Obviously, any proposal to substitute other forms of transportation or even to curtail the number of passengers would seriously interfere with his business. The owners of the corn grinders also objected strenuously, since their grinding fees would be curtailed; the city of Puebla objected because, instead of collecting marketing fees from fifteen hundred people, they would be able to collect from only a limited number. Even the consumers objected that machine-made tortillas might not taste so good as hand-made ones. The director assumed that he could do nothing over the vigorous protest of the cacique, since the latter, if necessary, would use his political influence with the governor, who, in turn, might write to the Secretariat of Public Education in Mexico City requesting that the mission be withdrawn from the area as a disturbing element. The director says he knows from sad experience that the secretary would not argue against the wishes of the governor but upon the latter's request would immediately withdraw the mission. The whole project was therefore abandoned. Nevertheless, the director did persuade the governor to work out an agreement with the city of Puebla whereby the tax on the selling of tortillas should be reduced.

Although vested interests prevented the establishment of the large co-operative, several smaller ones were organized and include the following:

1. Five brickmaking co-operatives were established. Each of these has from six to ten members, and they are finding ample demand for their product. Previously, what little brick was used in the area was brought in from Puebla. Now that bricks are available at a cheaper price, they are being used more widely in the area, and some are being sold in the city.

2. Four small consumers' co-operative stores have been organized, with memberships varying from six to eighteen persons. The capital with which they have to operate is pitifully small, but the co-operators have a great amount of enthusiasm. It is too early to tell whether or not they will be successful.

3. A soapmaking co-operative has been organized with eight mem-

bers. There appears to be ample demand for the product, since no such enterprise previously existed in the area.

4. When the mission arrived, there was not a milk cow in the entire area, and, except for milk from an occasional goat, the inhabitants were entirely without it. A few families recently purchased co-operatively three Holstein cows, and they are now getting all the milk they can use for themselves, with some for sale in addition. The teacher of agriculture has constructed a small pit silo for making corn ensilage. This seems to have proved successful, and the neighbors are enthusiastic about its possibilities for conserving feed for their livestock. They had not heard of such a device before.

5. Many families in the area keep a few chickens, but they are mostly of very poor stock, are small in size, and lay very few eggs. The teacher of agriculture brought his own incubator to San Pablo and persuaded a few residents to purchase eggs from producers who kept such breeds as Rhode Island Reds, Leghorns, and Plymouth Rocks. Five thousand eggs have been hatched from these better breeds during the past year.

OTHER ACTIVITIES

In general, houses are very small, frequently consisting of one room, wherein cooking, sleeping, and living take place. The same room sometimes serves as shelter and sleeping quarters for a variety of domestic animals, such as a pig, a dog, a cat, a goat, and several chickens. Ordinarily, the houses are made of adobe, with dirt floors and with the door, which is securely closed at night, serving as the only aperture. A few houses contain one small opening in addition to the door. Where this is the case, the opening is only a few inches in width and 1 or 2 feet in length. Usually, members of the family sleep on straw mats thrown on the dirt floor and use a blanket for covering. The mission is trying to persuade them to make modifications along the following lines: (1) to separate kitchen from main living quarters; (2) to separate animals from sleeping quarters; and (3) to build small platforms to serve as beds.

A group of families badly in need of houses was organized with the idea that they would build houses for one another on a co-operative plan, each one donating his labor for the others' houses and, in turn, receiving the labor of all the others on his own. A number of houses have been finished under this plan, and others are under construction. These new houses have several rooms and are supplied with

adequate openings for windows. The mission is in hopes that the patterns will be copied by others.

Cooking is usually done on a *brasero* or an open fire in the one-room structure. The fire is only a few inches off the floor, so that women are forced to kneel on the ground for hours each day. With no escape from the smoke, the entire house is saturated with it, and women complain that their eyes are always inflamed and uncomfortable. As a result of the efforts of the mission, eight residences now contain brick stoves elevated off the ground. These have been constructed under the supervision of the mason and are so arranged that women may now stand up to cook. Brick chimneys conduct smoke out of the house. The design is simple enough to be copied easily, and the social worker is urging other families to instal it.

Ordinarily, the local residents eat practically no vegetables. The teacher of agriculture secured a small plot of ground near the church in San Pablo to serve as an experimental garden. In it, with the help of the neighbors, he has raised a number of varieties of vegetables for demonstration purposes. He has also persuaded a number of families to make use of plots near their houses for planting small vegetable gardens. Simultaneously, the social worker has conducted a campaign to teach housewives the importance of having vegetables in the diet and has given advice on their preparation.

The teacher of agriculture has assisted local families in pruning and caring for their fruit trees. He also has helped them secure and plant additional trees for which the soil seems to be well adapted. About nine thousand fruit trees have been planted or grafted onto other trees.

The local residents know little about sanitation and modern health practices. There are a number of *curanderas* in the area. Some of them might well be classed as witch doctors. They use a wide variety of remedies, some of which include herb treatments that in certain instances may be helpful, but other practices probably serve only to aggravate the malady. Prescriptions of the latter type, such as the following, have been observed since the mission arrived.

A girl of fifteen suffering badly from malaria was annointed all over her body with red chile and ordered to lie with her naked body exposed to the hot sun.

A *curandera* was called in to cure a small child whose body had been badly burned. She argued that the only way to heal a bad burn is by applying more heat to counteract that already present. Therefore she poured hot water over the burns on the child's body. It died.

Outbreaks of smallpox have been common in the area. Eleven cases appeared soon after the mission arrived. The nurse conducted an intensive campaign for vaccination and has kept the disease from spreading. She also has given injections against typhoid fever and other diseases to hundreds of people. She has tried to teach a few of the elements of sanitation and first aid. She has organized the eighteen *parteras* ("midwives") of the area into a group for receiving weekly classes on the rudiments of midwifery. They are being persuaded to secure at least a minimum of equipment, including some sterilized cotton, gauze, alcohol, a small bottle of iodine, and a small pair of sharp scissors. None of them possessed any such elaborate equipment before. In fact, it is not uncommon in this area for the expectant mother to retire into a corner on the dirt floor and to bear her child in absolute solitude, with no help or sanitary precautions whatsoever.

The nurse has also persuaded small groups of families in each village to pool their resources and purchase a few elementary medical supplies, such as iodine, aspirin, bandages, and purgatives. These are deposited at the local schoolhouse in each village, and the schoolteacher is designated as chief pharmacist and prescriptionist. The crowning achievement of the mission as far as health problems are concerned has been the persuading of the state governor to cooperate with the federal Department of Health in establishing a medical unit at San Pablo. This will include the services of a full-time physician, a nurse, and a pharmacist. They will have at their disposal a small infirmary which is being established in a wing of the church building.

There is an elementary school in San Pablo, which gives instruction in the first four grades. There is no schooling available in the municipality beyond the fourth grade; each of the surrounding villages has a school, but these include only one or two grades. For the most part, the schools are inadequately equipped for even the small amount of schooling they do offer. The school at San Sebastián, for example, consists of one small room in which 85 children are taught by one teacher. This room also serves as temporary living quarters for the teacher.⁶ There is seating capacity for only about 40 pupils, so that when all are present more than half must stand up. At the time of the author's visit only a dozen books and twenty-five pieces of chalk were provided for the needs of these 85 children during the entire year. The mission has

6. Evening classes for 32 adults are also conducted in the same room.

persuaded the local residents to build a new brick schoolhouse which will be large enough for their needs. All the labor is donated by the villagers themselves, and the bricks are made by one of the newly organized brickmaking co-operatives at a very cheap price. A building is being remodeled to serve as the teacher's residence. The mission has also persuaded the residents of the municipality to construct an additional schoolhouse at San Pablo so that the fifth and sixth grades may be added to the school program.

The music teacher gives individual and group instruction in both vocal and instrumental music. He has organized and trained a forty-piece band, which now gives concerts about once a week in the plaza at San Pablo. He also has organized several orchestras. Groups of children from six to fifteen years of age are being taught to play instruments. The recreation specialist is teaching both children and adults to engage in sports of various types. Baseball, basketball, and volleyball are the favorites. He is also reviving interest in some of the almost forgotten native dances. The social worker not only visits individual homes but has a number of groups of women meeting once a week for instruction in cleanliness, cooking, sewing, or home improvement. The carpenter has taught a number of families how to construct simple household furniture, such as tables, chairs, stools, and platforms to serve as beds. These rudely constructed furnishings are considered luxuries by the few families which possess them, since most homes in the area are completely devoid of anything that could be called furniture.

The mission has now been in the area three years and is being removed about twenty miles to another section of the same state. After the mission moves, it is planned to have the members return to San Pablo about once a week to encourage continuation of the work by the local inhabitants. Each member has attempted to give special training to a few apprentices who are expected to assist in carrying on the work. It is admitted that the effectiveness of the program will be measured in terms of how well it is carried on after the mission leaves. The director has no illusions of having revolutionized the community. He admits that only a fraction of the population has been reached effectively and that there is some likelihood that these people might revert to their old customs after the mission's departure. He does not claim to have accomplished more than to have given the community a little help in improving the elementary techniques of living and to have demonstrated to the inhabitants that the government is seriously interested in their welfare.

A newcomer visiting San Pablo del Monte for the first time might experience difficulty in detecting any of the accomplishments of the mission unless they were specifically pointed out to him. Such a large proportion of the population lives just as it did before the mission arrived that the few modifications which have been introduced tend to escape the eye; but to the author, who visited the area early in 1942, soon after the mission arrived, and again in 1944, the accomplishments seem tangible and significant. The inhabitants feel that they have been given a lift, and they look forward to the future with confidence. It is to be hoped that the stimulation has been effective enough so that some of it at least will carry over after the mission leaves.

THE RURAL RECONSTRUCTION CENTER AT CAMOHMILA

Somewhat similar to the objectives of the rural cultural missions are those of the rural reconstruction center of Camohmila sponsored by the International Young Men's Christian Association. The methods of approach, however, are very different. The Camohmila project was established as a long-term demonstration project, located permanently in a carefully selected spot in an area which is characterized by backward agricultural practices and low standards of living and where the wheel is not yet used. Dr. D. Spencer Hatch, who has spent twenty years doing rural reconstruction and rural education work in India, is in charge of the project. The center is located about three-quarters of a mile beyond the end of the road which terminates at Tepoztlán in the state of Morelos. It includes a plot of eleven acres of farm land and a few buildings which together form the basis of a demonstration center for rural people in the area. The project is so situated that the inhabitants from eleven different villages located in two valleys must pass it in order to reach the larger village market at Tepoztlán. Since the valleys are on a slope, the highest village is 3,500 feet higher than the lowest, and the climate ranges from temperate to tropical in a very short distance. This is deemed an advantage because crops that are adapted to this region may be adaptable to a large area of the Republic.

One of the first activities of the project was to attempt to rebuild the soil which had been seriously depleted. No attention had been given to crop rotation or to the problem of trying to determine what the land could best produce. The soil at the center was analyzed, and steps were taken to restore its fertility. This was partly accomplished through the making and using of compost. Several types of field crops

and vegetables were planted in an effort to find new crops adaptable to lands that previously had grown only corn. Many varieties of fruit trees were planted, and it is believed that some of these will do very well here. Livestock and poultry were introduced into the project, including:

Poland China pigs, Gabardine milch goats, Jersey and Holstein bulls, merino sheep, barred Plymouth Rock and white Leghorn chickens, and Peking ducks. There is no intent to maintain a large number of any type of livestock but rather to keep only a few for experimentation and for breeding up the stock of the villages, largely through distribution and circulation of males.

To house the livestock, several small model structures were built, with the idea of their being copied. Before the first model poultry house was finished, one of the villagers had not only copied it but had built one twice as large, concrete floor and all. Lacking chicken wire with which to build the front, this villager had ingeniously used wild bamboo, firmly set in mud.⁷

A model house adapted to the needs of the villagers has been constructed in one corner of the plot adjacent to the path by which villagers from the valley must pass on their way to and from Tepoztlán.

It is of adobe, not much more costly than the ordinary house here, but it is whitewashed, has a floor, windows, a place raised from the floor for making tortillas, a 43-cent shower bath, beds of loose springy boards on wooden horses, which can be taken apart and put out in the sun. On the beds are warmer and more comfortable corn-husk mattresses than the people are accustomed to, and a patchwork quilt that was made right in the house. For the first time in this region, stovepipes direct the smoke out of the house. Around the house can be seen a lawn, fruit trees, and a garden to ensure green food at all times.

Many visitors have stopped to see *Yancuic Cali* ["new house"]. A young teacher, recently married, said she had a piece of land in Tepoztlán and that such a house would just suit her and her husband; they have started building. Girls in Ixcatepec village are saying to the boys: "We won't marry any boy who won't make us a model house." Melquidades, who had worked as a laborer building *Yancuic Cali*, married and soon began making adobes for his house to be built on a beautiful site overlooking the brook. He is building his house with the help of only one other boy.

The leader of Ixcatepec has rebuilt his house which, though consisting of one room and a kitchen, had housed a family of 11. "I'll make it," he said, "as bright and attractive as *Yancuic Cali*." He made more rooms, including bathroom and dining room, put in sufficient windows and doors and a concrete floor, and colorwashed all of it. Following the example at *Yancuic Cali*, the nearest village has made plans for latrines at homesteads and for the new school which has been built with the co-operation of the people, the Y.M.C.A., the Center, and the Government. So began the movement for better and healthier housing.⁸

7. D. Spencer Hatch, "Rural Reconstruction in Mexico," *Agriculture in the Americas*, IV, No. 3 (March, 1944) 52, 53.

8. *Ibid.*, p. 53.

Dr. Hatch holds to the philosophy that it is inadvisable to try to bridge the gap between seventeenth- and twentieth-century agricultural practices and techniques of living all in one jump. He believes that changes should be introduced slowly and gradually by means of demonstration. He says he will feel satisfied if he succeeds in bringing the villagers forward one or two centuries at a time.

He reports that the villagers are responsive to suggestions for change, provided that the new practices are clearly and effectively demonstrated:

Work projects at the Center that show good results and are suitable to the area are viewed with great interest by the native folks. When they decide to adopt a new idea or practice, they are willing to pay the price, whatever it may be. Stubbornness is a virtue with them. They cannot be induced to do something they do not want to do or do not believe in. Offer them money many times the value of a piece of land, a donkey, or a duck, and it tempts them not at all if they have decided not to sell.

Quick response to new ideas is characteristic of the women as well as of the men. When the Center was inaugurated, a few samples of patchwork quilts and wool sweaters were exhibited which teachers in the Ixcatepec village had taught some of the girls to knit. Many women and girls who saw the exhibit immediately wanted to learn to knit. Now there are 89 women and girls in the knitting class. At first the girls knitted only for their families who were in need of warm clothing but they soon became so proficient that they had sweaters to sell. An order for 200, in bright shades of brown, green, blue, and gray, were ready long before the promised delivery date.⁹

It is too early yet to evaluate the results of this project. A few families in the neighborhood have shown definite signs of wishing to copy the practices here introduced. Whether these families will carry through with permanent changes and whether these changes will be copied extensively are the big questions. The long and successful experience of Dr. Hatch in India leads him to believe that copying will be widespread and will leave its effect on the agriculture and rural life of a fairly wide region. To the outside observer, Camohmila is but a tiny pinpoint on a large map of Mexico. The number of people now falling under the influence of the project seems utterly insignificant in relation to the number who need instruction and guidance in the improved techniques of farming and living; but if Camohmila serves as a nucleus from which concentric waves of improved techniques radiate, its influence might be greater than skeptics would imagine possible. This will be a most interesting project to watch.

9. *Ibid.*, p. 53.

CHAPTER XIX

Religion and the Rural Church

RELIGIOUS PREFERENCE

THE population of Mexico is predominantly Roman Catholic. According to the 1940 census, 96.6 per cent of all the inhabitants of the Republic belong to the Catholic church as compared with only 0.9 per cent who are Protestants and only 0.3 per cent who belong to other religious groups (Table 87). There are 443,671 individuals, or

TABLE 87
POPULATION OF MEXICO CLASSIFIED ACCORDING TO
RELIGIOUS BELIEF, BY SIZE OF COMMUNITY*

RELIGIOUS BELIEF	TOTAL MEXICO		LOCALITIES OF OVER 10,000 INHABITANTS		LOCALITIES OF 10,000 OR LESS INHABITANTS	
	No. of Persons	Per Cent	No. of Persons	Per Cent	No. of Persons	Per Cent
Catholic.....	18,977,585	96.6	4,127,094	95.8	14,850,491	96.8
Protestant.....	177,954	0.9	67,167	1.6	110,787	0.7
Buddhist.....	2,664	.....	1,409	.....	1,255	.....
Hebrew.....	14,167	0.1	11,810	0.3	2,357	.....
All other reli- gions.....	33,094	0.2	9,365	0.2	23,729	0.2
None.....	443,671	2.3	90,944	2.1	352,727	2.3
Unknown.....	4,417	.....	451	.....	3,966	.....
Total....	19,653,552	100.0	4,308,240	100.0	15,345,312	100.0

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

2.3 per cent of the total population, who claim that they do not belong to any church. In the rural areas Catholics are probably even more preponderant. We have no data on this point for the strictly rural communities, but, of all persons living in localities with less than 10,000 inhabitants, 96.8 per cent are Catholics. The proportion of Catholics in the general population has decreased slightly more than 1 per cent since 1930, at which time they constituted 97.8 per cent of all inhabitants.

COMBINATION OF CHRISTIAN AND INDIGENOUS
BELIEFS AND PRACTICES¹

To say that Mexico is predominantly Catholic, however, implies a unity of religious faith and practice that does not exist. Actually, religion in rural Mexico is a combination of Christian and indigenous beliefs and practices which vary greatly in relative proportion from one region to another. The traditional Christian aspects predominate in the northern states of the Republic and in the larger cities. However, in the central and southern areas, where the vast majority of the rural population resides, the indigenous beliefs and practices constitute a substantial proportion of the total religious culture. Knowledge of this fact is very important for anyone wishing to understand religious behavior in Mexico.

There are several historical circumstances that have contributed toward this alleged combination of Christian and indigenous practices.

1. With the coming of the Spaniards the church was used as an instrument of conquest. "Conversion" took place on such a wholesale scale that there was little time either for indoctrination or for the teaching of moral precepts. The principal objectives during this early period were to bring the Indians under subjection to the Crown and to save them from extermination. In order to accomplish these objectives the early friars and priests worked so closely with the conquistadors that the Indians tended to regard the acceptance of the new religion as a part of the capitulating process. Often they understood neither the nature nor the requirements of the new religion. They knew only that their old gods had been defeated in battle and hence must give way to the new ones. The speed with which this substitution of gods took place may be illustrated by a few examples. Father Motolinía described the rapidity of his conversions as follows: "... in the five days that I was in that monastery another priest and I baptized by count fourteen thousand two hundred and some odd, anointing all with holy oils, which was no small task for us In that period a simple priest would in one day baptize four, five, and six

1. In preparing this chapter the author has found the following references to be particularly helpful and hereby expresses his indebtedness to them: Manuel Gamio, *La Población del Valle de Teotihuacán* (3 vols.; Mexico City, 1922); Frank Tannenbaum, *Peace by Revolution* (New York, 1933); Ernest Gruening, *Mexico and Its Heritage* (New York, 1928); Anita Brenner, *Idols behind Altars* (New York, 1929); and Robert Redfield, *The Folk Culture of Yucatan* (Chicago, 1941). Other references are listed in succeeding footnotes.

thousand; and in Xochimilco in one day two priests more than fifteen thousand."² In 1536 Motolinía estimated that more than nine million souls had been baptized in fifteen years.³

In some instances the conversions had to be made by means of gestures, since it took some time for the priests to learn the native languages. To initiate the process of conversion, the priests sometimes began by merely "pointing to the sky to show there was God, and dropping the eyes to the ground to indicate Hell."⁴

Obviously, such mass conversions were only superficial and had little meaning for the Indians, who were ordered by the conquistadors to obey the priests and who assumed, by accepting baptism, that they were merely complying with the responsibilities and penalties of defeat. It was only the comparatively few who had intimate and prolonged contact with some of the early Fathers who really learned to understand Christianity.

The perpetuation of the indigenous beliefs and practices was facilitated by the fact that the Christian churches were often built on the ruins of the pagan temples, frequently on the same spot, amid the same surroundings, and with some of the same materials. This made it comparatively easy for the Indians to transfer their allegiance to the new temples without altering greatly their former customs and attitudes. They could continue to frequent the same spots for worship, and, although their old temples were replaced by new ones and their stone idols were replaced by wooden images, the Indians tended to endow the new with essentially the same supernatural characteristics possessed by the old.

Classic examples of the construction of Christian churches on the exact spot where the pagan temples had stood are to be found at Cholula in the state of Puebla, at Mitla in the state of Oaxaca, and at Amecameca in the state of México (see Pls. XVIII and XIX). It must be admitted that the erecting of Christian churches on the spot where the pagan temples had previously stood was a most effective psychological device for winning acceptance of the new church and allegiance to it. The early Christian Fathers made wide use of this psychology.

The Indians were permitted to retain many of the old ceremonial

2. Toribio de Benavente Motolinía, *Historia de los Indios de la Nueva España* (Mexico City, 1887), Trat. II, cap. iii, quoted in Gruening, *op. cit.*, p. 229.

3. Gruening, *op. cit.*, p. 229.

4. Torquemada, *Monarquía indiana*, quoted in Gruening, *op. cit.*, p. 230.

rituals and customs which had characterized their pre-Conquest religious activities. Their native dances were readily adaptable to Catholic traditions. They could maintain their mysterious costumes and dramatize the warfare between the Moors and the Christians as well as the outstanding events of the Christian calendar. At Christmas time they could present in dramatic form the accouchement of the Virgin, and at Easter, the Crucifixion.⁵ These adaptations gave continuity to the religious experiences of the natives and greatly facilitated their nominal incorporation into the Catholic church.

As Tannenbaum says, the church

... gave the Indian an opportunity not merely to save his life, but also to save his faith in his own gods—the Indian gods. It is true that the friars and priests destroyed the temples and the idols. But they built churches upon the very spots—Cholula, for example—where the old gods had ruled so long, and they filled the churches with saints, not unlike the old idols that had stood in the very same places. The Indians easily adorned the new saints with the virtues the old gods possessed, prayed to them in the same language, sang the same songs to them, danced the same dances, and even to this day occasionally sacrifice a chicken to the gods—the old gods—within and without the church. The holidays were on the same dates and in the same form. The Indians by custom and habit gathered from miles around, and prayed and danced and worshipped and sang to the gods of the *place* in the new temple.

This saving of the old relationship to the unseen universe played so great a role in the lives of the Indians that it helps to explain the hold of the Church upon the people of Mexico. The church not only saved the Indian from extermination by giving him an equality with the white man, but it saved his sense of place in the universe by giving him an instrumentality to perpetuate his beliefs; to practice his religion. The Church now housed two kinds of gods, the old and the new; observed two practices, the old and the new. The new practices had meaning only because they were so near the old, observed in the same places, on the same days, with the same dresses, the same dances, the same songs, the saints even looking like the old gods and just as personal. It saved the Indian's sense of the meaning of life, and as much as anything else, preserved him from complete moral degradation, from spiritual annihilation.⁶

Manuel Gamio describes the fusion of indigenous and Christian ideas and ceremonies that took place in the valley of Teotihuacán as follows:

... Indian religious ideas were preserved, but they were given the outward appearance of Catholicism; furthermore, the ideas of this religion were being gradually infiltrated by Indian ideas, or merged with them. The Indian dances,

5. Henry Bamford Parkes, *A History of Mexico* (Boston, 1938), p. 108.

6. Tannenbaum, *op. cit.*, pp. 38, 39. Reprinted by permission of the Columbia University Press.

or *areitos*, as they were called by the chroniclers, slowly evolved into the dances which are still today prevalent in the villages of the valley and in which appear Moors and Christians, saints and devils, some dressed in Spanish costumes and others wearing the ancient feather head-dress of the *areitos*. The deities of war, rain, corn, etc. were kept in their fundamental attributes; but they were given the name and dress of various saints; the images of Christ presented a profusion of blood and wounds, which by association reminded the Indians of their bloody rites.⁷

Finally, the geographical and social isolation that has characterized rural Mexico throughout the years has tended to perpetuate independent locality-group customs and to insulate the village inhabitants from effective incorporation into any universal church. Local variations in religious practice are so great that one scholar has been led to remark that there are about as many varieties of the Catholic church in Mexico as there are separate communities.⁸ The extreme localistic conceptions of religion are described in the study of Teotihuacán as follows:

Religion, like patriotism, takes on a completely local character. It is curious to observe the firm belief among the natives that their religion . . . is limited to their own territory. This idea is never expressed clearly. . . . When the natives are questioned concerning the existence of a religion superior to their own, they always respond in a confused manner. . . . It is certain that the idea of an Omnipotent and Omniscient God such as is conceived by Catholicism does not exist among the natives. Invocations to God to be sure, are frequent; but it is really the [local] *santos* who are addressed.⁹

A similar point of view is emphasized by Tannenbaum in the following words:

The Mexican Indian is parochial. His universe is exceedingly limited; the mountains that circumscribe his horizon define his intellectual and spiritual world. The gods he worships are the local gods. The saint is the saint of the village, and not infrequently conflicting claims of rival saints have led to long conflicts between villages. The gods are local; the saints are gods, physical gods who contain within themselves a miraculous power. The notion of an organized church, of a universal Catholic Church, is beyond the experience of the isolated primitive communities. . . .

What Mexico has had all through the centuries is a local religion—the religion of the village, with an occasional greater saint in the neighborhood for special veneration. Upon this local faith, the Catholic Church, with the help of the Spanish State, built up a national superstructure that connected with the Church

7. Gamio, *op. cit.*, I, xlv.

8. Eyler N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, 1937), p. 245.

9. Carlos Noriega Hope, "Apuntes etnográficos," in Gamio, *op. cit.*, II, 209.

universal. But apart from the cities this connection was unsuspected by the mass of the smaller communities. They knew nothing about it, and know little, if anything, about it now.¹⁰

FUNDAMENTAL RELIGIOUS SYMBOLS IN RURAL MEXICO

The more important symbols around which religious life in rural Mexico revolves are (1) the image of the Virgin of Guadalupe, (2) the village patron saint (*santo patrono*), (3) the local church edifice, (4) the domestic shrine, (5) the cross, and (6) the priest.

THE VIRGIN OF GUADALUPE

Among the greater saints whose influence extends beyond the horizon of the local village, the most widely recognized and universally worshiped among all groups is the image of the Indian Madonna, Our Lady of Guadalupe. Her image is found in the homes of the aristocratic families, often set in colored tile in an appropriate corner of the patio; it is found in the rude huts of the humble peasants; it may be seen on the dashboard of a taxicab or even illuminated by a small electric bulb in a front corner of a crowded bus. Under the banner of her image Father Hidalgo led his followers to fight for Mexican independence in 1810; and, more than a century later, under the same banner Emiliano Zapata led the Indian peasants to take up arms in the battle for land and liberty.

The official account of the origin of the image is as follows: In 1531, only ten years after the Conquest, a Christianized Indian by the name of Juan Diego was walking over the rocky hill of Tepeyac, a few miles north of Mexico City, when the Holy Virgin suddenly appeared to him and requested that he go to the bishop of Mexico and tell him that she desired a church built there in her honor. On the following day the Virgin reappeared to the Indian at the same spot and learned that he had been unable to arrange an audience with the bishop. The Virgin told him to return and tell the bishop: "It is Mary, the Mother of God who sends thee"; but the bishop demanded a sign in manifestation of the divine will. For the third time the Virgin appeared; this time she told the Indian to go to the top of the barren hill and pluck roses where nothing but cactus was known to grow. The Indian obeyed and returned to the Virgin with beautiful roses. She arranged them in his cloak and told him to bear them to the bishop as a sign. When he unfolded his cloak before the bishop, there was an image of

10. Tannenbaum, *op. cit.*, pp. 61, 66. Reprinted by permission of the Columbia University Press.

the Virgin miraculously stamped upon it! The bishop was so convinced of the authenticity of this miracle that he ordered the beautiful Church of Our Lady of Guadalupe built at the scene; and a solemn procession conveyed the image of the Indian Virgin and placed it above the high altar within the church where it remains to this day. This miracle is officially indorsed by the Roman Catholic church, and the Virgin of Guadalupe has become Mexico's patron saint (see Pl. XX).

It is interesting to note that, although the Virgin of Guadalupe appeared to Juan Diego in the official account as the Virgin Mary, Mother of God, throughout Mexico she appears as a *morena*, with a dark skin quite unlike the usual images of the Virgin Mary. It is also doubtful that the Indians recognize her as the Mother of Christ. She more nearly represents to them a divine being in her own right, similar to the Indian goddess which was worshiped near the same spot before the Spaniards arrived.¹¹

Indians make pilgrimages to this shrine from many parts of Mexico. Large crowds congregate in the plaza in front of the church and make their way slowly toward the door. As they enter, they fall on their knees and crawl forward until they arrive at the coveted spot whence they can gaze at the image. Here they bow their heads and utter prayers; then they pass through one of the side doors, permitting others in the long procession to move up to the coveted position where they, also, may get a glimpse of the image. As Northrop says: "Here is something which has captured the emotions and the souls of the people. . . . Nothing to be seen in Canada or Europe equals it in the volume or the vitality of its moving quality or in the depth of its spirit of religious devotion."¹²

One is reminded that the church of Guadalupe is not a cathedral but a basilica, the third church in rank in all Roman Christendom.¹³ Such is the recognition it has received officially from the Roman Catholic church.

THE VILLAGE PATRON SAINT

Even more important than Our Lady of Guadalupe or any other greater saint to the average villager, however, is the local patron saint, who is considered the protector (*patrón*) of the village. His wooden

11. See Gruening, *op. cit.*, p. 236; and Parkes, *op. cit.*, p. 108.

12. F. S. C. Northrop, *The Meeting of East and West* (New York, 1946), p. 25. Reprinted by permission of the Macmillan Company.

13. *Ibid.*, p. 26.

effigy is displayed prominently in the local church. Usually the village is named in his honor,¹⁴ and, although the church may shelter images of other saints, this particular one is believed to have more miraculous power in that particular community than any of the others. To him the natives go with their troubles and present their petitions for special favors. As Noriega says:

To him goes the Indian who is afraid of losing his corn crop for lack of rain, the woman who wishes a successful delivery from pregnancy, the sick who pray for health, those who have pending accounts with justice and wish to be forgiven; in short, all those who wish or fear. Since all inhabitants of the town come to the *santo* for help, many of the things requested are fulfilled: it rains and the corn field is green once more, the child is born safely, and these are all miracles performed by the favorite saint, through which devotion to him increases, offerings multiply, and his clothes show more laces and spangles. When the miracle is not performed, the bad impression is not taken into consideration, since it is overshadowed by all the accomplished feats.¹⁵

The importance of the physical image of the *santo* in religious worship in the villages has been stressed by numerous observers. Among the Indians it appears that it is the particular effigy that is worshiped rather than any unseen person which it might represent. This point has been observed by numerous writers and receives considerable stress in the study of the valley of Teotihuacán:

It is clear that the Indians do not thank the invisible saint, roughly materialized, but the sculpture which they have before them. The day an image is lost or destroyed there is general consternation, because the miraculous being who fulfilled all the wishes of the people has disappeared, and they are never satisfied by an image similar to the previous one, even though it represents the same saint.¹⁶

Redfield claims that in Yucatán there is a distinction in this regard between the patron saint, or *santo*, and the other saints who are appealed to occasionally as specialists. He claims that the role of the effigy is all-important in the first case but not necessarily so in the second:

The saints appealed to in special connections—St. Mark in connection with agriculture and St. Isidore in connection with hunting deer—receive appeals without the necessity of the presence of any effigy, and even independent of an

14. Often the Indian name of the village is preserved, and the Spanish name is added as a prefix. This sometimes results in long and unwieldy names, such as "San Pedro Yeloixtlahuacán," a village in the state of Puebla having a population of 1,115 inhabitants.

15. Noriega Hope, *op. cit.* (Gamio, II, 214, 215).

16. Noriega Hope, *op. cit.* (Gamio, II, 215).

effigy of St. Mark or St. Isidore that may exist in some village. They are beings of special interests or functions existing in heaven or in the woods. But the patron saint, whatever his name, is the symbol of the group of which it is patron, village or family as it may be, and of all the needs that that group may experience. He exists in the village or family shrine in the form of an effigy which in itself has power and sanctity. You cannot honor the patron without the presence of the effigy.¹⁷

The important role of the effigy is also stressed in the study of Tepoztlán, where it is stated that "there are usually a number of images in each church, but only one, usually enshrined in the principal altar, is the local guardian. . . . It is the particular effigy that is venerated; reports are plentiful of the refusal of the people to accept a new effigy of the saint as at all the equivalent of the old."¹⁸

The miracles performed by the local *santo* are numerous and varied. Some church walls are literally lined with testimonials (*retablos*) recounting these miraculous performances and containing drawings to illustrate them. These miraculous manifestations may range in quality from the relatively insignificant to the truly spectacular. Accounts of miracles such as the following are not uncommon. It is said that during the Revolution the Carrancistas tried to enter the little church of the Barrio of Santa Cruz in the village of Tepoztlán, Morelos. They fired bullets into the door, but these bullets flattened as they struck the wood and refused to penetrate it. One soldier finally did get into the church, but as he approached the altar of the *santo* he fell dead.¹⁹

Sometimes a local *santo* acquires prestige in neighboring villages as well as in his own, and residents of these other villages call on him for certain special emergencies. For example, one *santo* may gain fame as a rainmaker through testimonies of his miraculous performances; another may be accredited with particularly spectacular miracles of healing. In such cases, in addition to serving as general patron and protector of the village, a local *santo* may gain a reputation in surrounding villages as a specialist. Hope tells of a *santo* in the valley of Teotihuacán that had gained fame for causing rain when the crops began to wither for lack of water. During the dry season this *santo* was often carried from one church to another, followed by villagers supplicating for rain.²⁰ When word of particularly spectacular mira-

17. Redfield, *op. cit.*, pp. 241, 242.

18. Robert Redfield, *Tepoztlán—a Mexican Village* (Chicago, 1930), p. 195.

19. *Ibid.*, p. 195.

20. Noriega Hope, *op. cit.* (Gamio, II, 222).

cles is spread over a wide area, there sometimes develop regional or even national shrines, such as Guadalupe, Chalma, or Amecameca.

It should be remarked also that the saints may express their displeasure as well as their approval. They do this by inflicting punishment of some kind on the transgressor. According to Redfield:

A miracle, as often as not, is the expression of supernatural power in the form of punishment of the unbelieving or the impious. A man, for instance, treats the fiesta lightly and is visited with sickness or blindness or other trouble. By some it is thought difficult even to gaze steadily upon these images because of the awful power they exert.²¹

Hope relates an instance when the *santo* even inflicted punishment on the local priest for failing to show proper devotion.²²

In order to show their response to the *santo* for his protection and special favors, the villagers hold an annual fiesta in his honor. For the purpose of perpetuating this custom and making sure that the celebration will be an adequate one, plans are made from one year to the next through an institution known in many localities as the *mayordomía*. This involves the designation of some person in the community to have charge of the planning, arranging, and financing of the fiesta for the succeeding year. Such a person is known as the *mayordomo*, and he is often referred to as the "burden-bearer" for the *santo* during the year of his office.²³ It is expected that he will pay a fair proportion of the expenses of the fiesta out of his own resources, even if this involves the spending of the equivalent of his total income for a period of several years, leaving him almost penniless. He may distribute part of the financial burden among other members of the community by appointing committees to help provide the fireworks, music, and food. Others may help with the candles and flowers for the church altars and other necessary items of religious and recreational importance. Firecrackers are generally considered indispensable to the success of any fiesta in Mexico, religious or otherwise. In some villages there are families who specialize in the making of fireworks. They spend the major part of the year preparing for the succeeding annual fiesta. Very elaborate and unique displays of fireworks may take place in a small and inconspicuous village.

The fiesta is ordinarily considered as an expression of gratitude to the *santo* on the part of the community and as a supplication for his

21. Redfield, *The Folk Culture of Yucatan*, p. 243.

22. Noriega Hope, *op. cit.* (Gamio, II, 215, 216).

23. Robert Redfield, "Folkways and City Ways," in H. C. Herring and H. Weinstock (eds.), *Renascent Mexico* (New York, 1935), pp. 30-48.

future protection. All are expected to assist in one way or another, but the burden of the major responsibility rests on the *mayordomo*, and this he may not shirk.

The fiesta in a particular village always occurs at the same time of year and nearly always on the same calendar day. One's devotion is judged by the role he plays and the seriousness with which he participates in it. Usually the fiesta opens with an early morning Mass, provided that a priest is available. Then follow the dances. These are considered to be the most important part of the fiesta. They are usually continued throughout the entire day and sometimes last as long as three days, disbanding only during the night. The performers often rehearse their parts on Sundays for months in advance. In some villages rather elaborate, colorful costumes are worn and are preserved from one year to the next because of their cost (see Pls. XXI and XXII). Exceedingly grotesque masks are often worn. The dances are frequently woven around the theme of some biblical story, although extraneous characters are usually introduced and often the story is distorted by the injection of characters from one story into another.²⁴ Often it is difficult to recognize any connection whatsoever between the dances and the biblical accounts, and an outside observer may experience difficulty in interpreting their meaning.

During the course of the fiesta, pulque and other intoxicating beverages flow freely, and, as the day wears on, some individuals become so saturated with these liquids that they gradually lose all control of their behavior. Drunkenness is a common sight at almost any fiesta.

Lucas Alamán, writing prior to 1849, could see little religion in these supposedly religious celebrations:

The people, little instructed in the essence of religion, make up for this in the pomp of their religious ceremonies, and lacking other diversions they rely for these on the religious functions. Especially during Holy Week they take part in numerous processions and re-enact the most sacred mysteries of the redemption. The church festivals which should all be spiritual were thus converted into vanity, with fire-crackers, dances, plays, bull-fights and cock-fights, and even inclosures for playing cards and other diversions, to celebrate at great expense the solemnities of patron saints of their villages, to which end the Indians invested the greater part of the fruits of their toil. This profane and little pious pomp is what caused the oft-quoted viceroy to say, "In this kingdom all is external show and most of the people living in vice think that wearing a rosary and kissing the hand of a priest makes them Catholics."²⁵

24. Noriega Hope, *op. cit.* (Gamio, II, 232 ff.).

25. *Historia de México* (5 vols.; Mexico City, 1942), I, 69.

A villager, when praying to the local *santo* for some special favor or after becoming the recipient of a miraculous manifestation, usually promises to reciprocate in some small measure. This often takes the form of making a vow to take part in the annual fiesta to the patron saint. Participation as a dancer in the annual fiesta to the *santo* is often considered to be a worthy manifestation of one's appreciation of a miraculous manifestation.²⁶ In a testimonial which the author copied from the church in the little village of Ixcatepec, Morelos, in 1944, the beneficiary of a special healing promised to assist with a cockfight at the annual fiesta of the *santo* in order to show his appreciation. This testimonial reads as follows:

In the month of March of 1937 I was menaced by a dangerous disease and not finding relief I sent a prayer to the Holy Image of the Lord of Ixcatepec and I recovered my health as if by lightning. As an expression of my gratitude and to thank Our Lord I promised to contribute to the celebration of the fiesta that is to take place by assisting with a cockfight, so that Our Lord may have a bigger fiesta. With the same devotion I dedicate today the present *retablo* for having recovered my health which I had not expected to do.

TEPOZTLÁN—March 6th, 1940

(Signed) P. ANJALA D.

In addition to participating in the annual fiesta, a villager who wishes to find favor with his local *santo* may purchase candles to burn on his altar, or, if able, he may hire a special Mass. Some villages have a *milpa* set aside for the benefit of the *santo*. This is tilled by all the villagers, and those wishing extra favors may perform extra work. In other cases a villager may loan a part of his farm for the use of the *santo*. This latter practice was reported to the author in Tepoztlán. Also prayers may be said, songs may be sung, special offerings may be made in the form of flowers to decorate the altar, or some special forms of penance may be undertaken. Two friends of the author reported having observed Indians wearing crowns of thorns on their heads in a pilgrimage to a shrine in the state of Colima in 1944.

Of all the religious symbols and ceremonies found in rural Mexico today, those concerned with the local village *santo* are probably the most important and meaningful. Village life practically revolves around the *santo*, especially in the more isolated regions. He gives stability and continuity of purpose to the community as well as protection and consolation. Life may go on calmly and uninterruptedly

26. Noriega Hope, *op. cit.* (Gamio, II, 217).

in the absence of the priest or of the ceremonies which he administers, but when misfortune befalls the local *santo* there is consternation in the village.

THE CHURCH EDIFICE

The widespread distribution of churches is one of the marvelous phenomena of Mexico. The church is found in the vast majority of villages, even in the more isolated areas. One wonders at the thoroughness with which the early padres spread out over the land, penetrating the jungles, the high sierras, and the plains to harness the tremendous human energy that must have gone into the construction of these temples. Their achievements were probably due to a combination of factors. (1) The padres were imbued with a crusading zeal which led them to undergo untold hardship and sacrifice in the belief that they were saving the souls of God's children. (2) They must have had unusually good talent and training in architecture, sculpture, construction, and art. (3) They had at their command a large labor supply. The Indians had built in many parts of the land thousands of pyramids and temples to their old gods, and undoubtedly they did not consider it unusual to be required to spend a fair proportion of their time as laborers on the temples of the new gods. (4) One of the criteria for success must have comprised the following formula: (*a*) number of conversions, (*b*) number of pagan temples destroyed, and (*c*) number of Christian churches erected in their stead.

The destruction of old temples and images was considered one of the best ways of eradicating the old religions. The padres undertook this task with great enthusiasm. Three Franciscans, for example, boasted of having destroyed five hundred temples and twenty thousand images in seven years.²⁷

On the other hand, Christian churches were erected with corresponding energy. Not only did a church appear in nearly every village, but villages of any size were recipients of two, three, or even a dozen churches. The town of Cholula, with a population of 8,424, is reported to have contained 365 churches, or one for every day in the year. The churches thus became widely distributed even in the isolated regions, and the allegiance of the Indian was rapidly shifted to the new temples as the center of religious worship. In the temple is housed the patron saint, and for this reason, if for no other, it becomes a sacred spot in the mind of the villager. The church usually towers

27. Herbert I. Priestley, *The Mexican Nation: A History* (New York, 1938), p. 100.

far above the rude jacales or the small adobe structures which are grouped around it. It is so much more impressive from the standpoint of size and workmanship than any other structure in the locality that this very fact, together with its strategic location, tends to inspire awe on the part of the local inhabitants. In it are found the highest artistic contributions of the community. The decorations of the altars, the drawings, the carvings, and the color all represent the best talent that the local community affords. Perhaps this is an additional reason why the church is an important symbol to the local inhabitants. They visit it when they go to the village market or when they feel depressed or when the burdens of life weigh heavily upon them. Visiting the church is, to them, like suddenly entering another little world where cares can be left outside. As Northrop says:

A church with the diversity of vivid colors which the Indian aesthetic imagination demands would shock a Protestant congregation. But imagine, conversely, how the Protestant religion must appear to the religious Mexicans. Its exceedingly verbal preaching, its aesthetic color-blindness, and its emotional tepidity and coldness must make it look to them like no religion at all.²⁸

Ordinarily, each family has a chance to share in the care of the building and in the care of the *santo* housed therein. Practices in this regard differ from one area to another. A fairly common practice in the local village is the annual election of a supervisor for the church, who serves without compensation. It is his duty to make sure that the building is kept in order and that it is open for worship at specified periods, usually at certain hours every day of the week, and to have general charge of the building. The work of cleaning and caring for the church and of lighting the candles for the *santo* is sometimes delegated to families on a rotating basis for a week at a time. This work is done on a voluntary basis under the direction of the supervisor. Thus everyone has a right, and in many villages an obligation, to share in the common enterprise. This experience probably gives them an interest in the church building that they otherwise might not have.

THE DOMESTIC SHRINE

It is rather common in rural Mexico, though by no means universal, to find a small domestic shrine occupying one corner of a room in the home. This may consist of nothing more than a picture or a wooden effigy of some favorite saint to whom the family may turn in times of trouble. Sometimes the saint is one whose sanctuary has been visited

28. Northrop, *op. cit.*, p. 37. Reprinted by permission of the Macmillan Company.

on a pilgrimage made by some member of the family.²⁹ Near the effigy may be found a cross, a few candles, a vase of flowers, and other religious symbols. If for any reason it is impossible to visit the *santo* in the church, the domestic saint serves a similar purpose.

THE CROSS

The use of the cross as a religious symbol is widespread. In addition to being displayed conspicuously in the churches, in domestic shrines, and in cemeteries, it is often found at crossroads, or along the trail so that villagers, traveling from one town to another, may stop to kneel and pray. Usually it is erected upon a pedestal 3 or 4 feet in height. Sometimes it is to be found on a street corner or near a watering place in an Indian pueblo. Almost invariably it is adorned with a pot of flowers.

THE PRIEST

Although the churches are widely distributed, even in the isolated rural areas, the same cannot be said of the priests. Their distribution is unequal in that they tend to cluster in the larger communities. Religious life in the smaller and more isolated villages goes on in the traditional manner often without any priest or with only an occasional visit from one.

The religious isolation of the smaller villages may be illustrated by the present situation in the municipality of Tepoztlán in the state of Morelos. This municipality has a total population of 6,034 inhabitants, of whom 3,230 live in the large village of Tepoztlán, from which the municipality was named. The remaining 2,804 inhabitants are distributed among about ten smaller villages of the municipality. The large village of Tepoztlán is divided into seven *barrios* ("wards"), each of which contains a local church. There is also a church in each of the other smaller villages of the municipality. There is only one Catholic priest in the municipality, and he lives in the large village of Tepoztlán. With seven churches to look after in the large village, he is reluctant to straddle a mule and ride over the hills to the other villages. He visits them regularly only once a year on the day of the annual fiesta. Other visits are the result of special arrangements. He charges a stipulated fee for each type of Mass in these outlying villages, and the villagers hire him to come whenever they want him badly enough to pay the price. In the absence of a priest the com-

29. Elsie Clews Parsons, *Mitla—Town of the Souls* (Chicago, 1936), pp. 204, 205.

munities carry on in the traditional manner that has characterized their religious behavior for ages.

According to the population census of 1940, there were in Mexico at that time 1,979 Catholic priests or one priest for every 9,931 inhabitants (Table 88). In the urban areas there were only 4,727 inhabitants per priest, while in the rural areas there were 24,532. In other words, the rural areas contained about two-thirds of the population but only one-fourth of the priests. This relationship is not new. It has existed for generations. Since colonial times the Catholic priest in Mexico has been much more attentive to the interests of the upper classes in the cities and the large landowners than to the needs of the

TABLE 88

NUMBER OF CATHOLIC PRIESTS IN RURAL AND URBAN AREAS OF MEXICO
IN RELATION TO NUMBER OF INHABITANTS, BY REGIONS*

REGIONS	NO. OF PRIESTS			PER CENT OF PRIESTS IN RURAL AREAS	PER CENT OF INHABIT- ANTS IN RURAL AREAS
	Total	In Urban Areas	In Rural Areas		
North Pacific....	70	34	36	51.4	70.9
North.....	248	193	55	22.2	64.6
Central.....	1,377	1,046	331	24.0	58.0
Gulf.....	120	94	26	21.7	68.3
South Pacific....	164	92	72	43.9	83.8
Total.....	1,979	1,459	520	26.3	64.9

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

general rural population. This is one reason why it has been natural for him to take the part of the large landowners and the politically powerful residents of the city in any dispute between them and the landless masses. He has seldom been close enough to the rural people to understand their needs or their aspirations. As Tannenbaum says:

In the last hundred years the Catholic Church in Mexico has been reduced to a hierarchical skeleton. It has lost its lands; it has lost its power. . . . But this change has had little effect upon the essential faith of the common people. The people are no less Catholic today than they were a hundred years ago. In fact, the change has chiefly affected the educated classes in the cities, where the weakening of the Church and the cutting down of the number of priests has made itself felt. Out in the thousands of little villages, where most of the people live, the Church goes on as it has since the conversion—without a priest. The life of the community was organized around the church, and the church was built around Saint John, or Saint Thomas, or Saint Caralampio, or some other saint.

Around him the old religion was entwined. He had replaced the older gods in full or in part. In some places the older traditions still persisted. To the new saint the same credence and obeisance was made that had been made before the older gods. . . . What has happened is that the super-structure of the Church has been well nigh destroyed. But it really never existed in the minds of the people in the villages and in the mountains among the Indians. Whether the Church is re-established or whether the priest is allowed to come again once every six months, the local religion of the village will go on as it has in the past. The superstructure inherited from the Conquest has here, as in the matter of race, economics, and politics, largely disintegrated. What has been left to the little village is a cross, a church, a saint. The cross is new; the church replaces the older shrine; and the saint takes the place of the older deity.³⁰

The activity of the priest in the rural areas is confined largely to routine ceremonial matters, for which he usually charges a stipulated fee. He is regarded more as a distinguished visitor or as a specialist with talents that might occasionally be employed in appeasing the *santo* rather than as one who plays a vital role as an active participant in the life of the village community. The priests in rural Mexico generally do not appear to be interested greatly in the physical, social, and moral welfare of their parishioners with the view of trying to improve their standards and levels of living. The author is of the impression that religion is one of the strongest social forces in rural Mexico today and that if properly harnessed it would probably be a most effective avenue for improving rural conditions. If the local priests would wholeheartedly encourage parents to send their children to school, foster health programs, and co-operate in promoting better housing, local communities could be revitalized much more quickly—but in Mexico rural priests generally do not do these things.³¹ In most cases they show little concern for social problems, and often they seem unaware that such problems exist. Apparently, the type of education they have received has left them with the attitude that social and economic problems of the community are beyond their field of responsibility. This attitude is in striking contrast to that found among many Catholic priests in the United States, as will be evident to anyone who examines a few issues of the magazine entitled *Land and Home*, official publication of the National Catholic Rural Life Conference. Perhaps

30. Tannenbaum, *op. cit.*, pp. 65, 66. Reprinted by permission of the Columbia University Press.

31. This has not always been true, of course. Some of the early priests left lasting monuments to themselves through their work to improve living conditions among the Indians. One need only mention such names as Las Casas and Vasco de Quiroga.

this is due to differences in the conceptions of the role of religion in the lives of the people. In Mexico religion seems to be confined more to the emotions and does not consider the everyday social and economic problems of the parishioners as its concern.

A number of priests have admitted to the author that rural priests take no part in community affairs, but they hasten to say that the reason for this is that they are prevented from playing any vital role in the life of the community because of the antichurch laws. They assert with sadness that about all the government permits them to do is to perform the routine church ceremonies.

ANTI-CHURCH LEGISLATION

Before inquiring into some of the factors which appear to have been responsible for bringing about government restrictions on the church, we turn to a brief summary of the antichurch legislation which is supposedly in effect at the present time. The more essential aspects of the various laws in the Mexican Constitution and in the various regulatory laws dealing with the church have been singled out and arranged under the following headings by the author. They do not follow the sequence given in the Constitution and the regulating laws, nor are the laws reproduced here in their entirety.

1. *Restrictions concerning the holding and control of real estate.*—Churches may not hold, acquire, or administer real property; nor may they hold mortgages on real property. All places of public worship are the property of the nation, and the federal government shall determine which of them may continue to be devoted to their present purposes. Permission must be obtained from the Ministry of the Interior prior to dedicating new places of worship; and all such places hereinafter erected shall be the property of the nation [Art. 27].

Every place of public worship shall have a person charged with its care and maintenance who shall be legally responsible for the faithful performance of the laws on religious observances within same, and for all objects used for purposes of worship [Art. 130].

Ministers are prohibited from inheriting real property from any religious organization, or from other ministers of the same religious creed, or from any private individual to whom they are not related by blood within the fourth degree [Art. 130].

2. *Church prohibited from administering charitable or research institutions.*—Public or private charitable institutions for rendering assistance to the needy, for scientific research, or for the diffusion of knowledge, or mutual aid societies may not, under any circumstances, be under the patronage, direction, administration, charge, or supervision of religious orders; nor may they be under the charge or supervision of ministers of any religious creed or of their followers, even though the former or the latter may not be in active service [Art. 27].

3. *Freedom of expression restricted.*—Ministers of religious creeds may not, either in public or in private meetings, or in acts of worship or religious propaganda, criticize the fundamental laws of the country, the authorities in particular, or the government in general; they shall have no vote, or be eligible to office; nor shall they be entitled to assemble for political purposes.

No periodical publication which, by reason of its program, its title, or merely its general tendencies, is of a religious character, may comment upon political affairs of the nation, or publish any information regarding the acts of the authorities of the country or of private individuals, in so far as they are directly connected with public affairs.

No assemblies of a political nature can be held within places of public worship [Art. 130].

4. *The number of priests restricted.*—The state legislatures shall solely be empowered to determine the maximum number of ministers of religious creeds, according to the needs of each locality.

Only a Mexican by birth may be a minister of any religious creed in Mexico [Art. 130].

5. *General limitation of church authority.*—The state cannot permit the execution of any contract, covenant, or agreement having for its object the restriction, loss, or irrevocable sacrifice of the liberty of man, whether on account of work, education, or religious vows. The law, therefore, does not permit the establishment of monastic orders, whatever be their denomination or purpose [Art. 5].

The federal authorities shall have power to exercise in matters of religious worship and outward ecclesiastical forms such intervention as by law determined. . . .

Marriage is a civil contract. Marriage and all other acts relating to the civil status of individuals shall appertain exclusively to the civil authorities. . . .

The law recognizes no juridical personality in the religious institutions known as churches.

Ministers of religious creeds shall be considered as persons exercising a profession, who shall be directly subject to the laws enacted in regard thereto [Art. 130].

No one may be tried by private laws or special tribunals [Art. 13].

It would seem that, in some instances, the foregoing restrictions on the church and the ministers are indeed severe. This would seem to apply especially to the right of the church to establish charitable institutions, the right of the clergy to vote and to exercise freedom of expression, the ownership of church buildings, and the right of the state to determine how many priests may function and how many church buildings may be used for religious purposes. Until 1946, Article 3 of the Constitution was a serious source of conflict between church and state. It was amended in 1946, and most of the objectionable parts were removed. Prior to this time it specified that education "shall be socialistic, and, in addition to excluding all religious doctrine,

it shall combat fanaticism and prejudice. . . .”(See complete version on p. 430.) Obviously, this article could be interpreted by some of the more “left-wing” teachers as giving them license to combat religion as such. Charges that Article 3 has been used for just such a purpose have been made repeatedly throughout Mexico. There has been so much controversy over this article that in December, 1945, upon recommendation of President Avila Camacho, the Senate and the Chamber of Deputies voted to amend it so as to remove most of the objections to it. The amendment was ratified by the states and became official on December 30, 1946. The amended version appears on page 430.

At the present time there is little in the antichurch laws that could be interpreted as being directed at the spiritual functions of religion as such. No religion is prohibited in Mexico, and there is no attempt to prescribe or limit the teachings of the church with reference to doctrine, moral precepts, or religious beliefs. With reference to these points the Constitution specifically states that “Congress is not empowered to enact any law establishing or forbidding any religion whatsoever” (Art. 130). The law does prescribe, however, that religious functions must be confined to places of public worship and that these shall be under governmental supervision. Article 24 of the Constitution reads as follows:

Everyone is free to embrace the religion of his choice, and to practice all ceremonies, devotions or observances of his respective creed, either in places of public worship or at home, provided they do not constitute an offense punishable by law.

Every religious act of public worship must be performed strictly inside places of public worship, which shall at all times be under governmental supervision.

Most of the restrictions appear to be aimed at curtailing the economic and political powers of the clergy and their right to intervene in the nonspiritual affairs of the nation. In attempting to limit these latter functions, however, the government has enacted measures against the church which are far more severe than those found in most Western countries.

WHY WERE LEGAL RESTRICTIONS PLACED ON THE CHURCH?

The question naturally arises as to why the Mexican government has found it advisable to place legal restrictions on the church in a country where 96.6 per cent of the inhabitants are avowed Catholics. In other words, why should legislative bodies whose members are Catholic themselves want to place restrictions on their own church?

The answer to these questions involves a brief glimpse at the relations between church and state in the past.

Legislation against the church appears to have been the result of a combination of factors.

1. After the Conquest the church accumulated wealth rapidly and soon became a very powerful financial organization. Through its control of finance and the manipulation of funds, it also became powerful politically, so that it was virtually able to exercise veto power over governmental policies. There are no data available that would indicate the exact amount of wealth controlled by the church during the height of its power, but a number of estimates by historians suggest that its control amounted virtually to a monopoly (chap. v). This vast accumulation of wealth resulted from gifts of large tracts of land from individuals seeking to save their souls; from the economic exploitation of the Indians; and from tithes and offerings.³² A contributing factor was that the property of the church was exempt from taxation, thus precluding competition from private individuals. This wealth became the object of envy on the part of politicians and of those who felt that their opportunities for acquiring property were blocked by the monopoly of the church.

2. The vast accumulation of wealth made it natural for the church to use its influence to maintain in power the type of government that would protect its material interests. This led it into open opposition to liberal movements tending toward nationalism and served to identify it with the reactionary forces which sought to maintain foreign dominance and control. Thus the church officially opposed the independence movement and threatened with excommunication those who took part in it. This does not mean that all priests opposed the independence movement. Some of the lower clergy favored it and risked their lives to bring it about. Indeed, the two foremost leaders of the War for Independence were Catholic priests. One of these was Father Miguel Hidalgo, who is officially honored in Mexico as being the Father of Mexican Independence. The other was Father José María Morelos, second in importance only to Hidalgo. Both these priests were captured, and the church withdrew from them their ecclesiastical immunity so that they could be executed. The independence of Mexico was achieved in spite of the official policies and opposition of the church.

3. After independence was achieved, the church refused to ac-

32. See. chap v.

knowledge the authority of the new government. The church had previously acknowledged subordination to the Crown in a great many matters through the *patronato*, a series of agreements, between the Pope and the Crown, which enabled the King of Spain to exercise some control over clerical appointments.³³ The new government claimed that, with independence, these powers of the Crown naturally were inherited by it; but the church refused to acknowledge this and appropriated these rights unto itself, thus claiming almost complete independence from the new government. The church also insisted on its right to the *fueros*, by means of which clerical offenders against the law could be tried only in ecclesiastical courts. These policies naturally set the stage for bitter rivalry for political and economic supremacy between church and state.

4. Once the liberals rallied sufficient influence to write into the Constitution of 1857 restrictions on the power of the church, the latter was placed in an untenable position by refusing to comply with the Constitution of the nation.

Although much of the so-called "antichurch legislation" has been on the books since the writing of the Mexican Constitution of 1857, the legislation has been enforced only sporadically. During the long regime of Porfirio Díaz, for example, schemes were entered into between church officials and the ruling group by means of which the laws could be successfully evaded. The church supported the Díaz regime during the Revolution of 1910 and has consistently opposed many of the reforms growing out of the Revolution. It has consistently championed the cause of the large landowners as opposed to the cause of the peons and peasants. Perhaps this was partly because it felt that it was dependent on the former for financial support and prestige. Many priests lived on the haciendas, were employed by the hacendado, and quite naturally used their influence to protect his interests.

The framers of the Mexican Constitution of 1917 saw fit to incorporate the antichurch laws of 1857 into the new constitution and to add a few additional restrictions. This legislation went largely unenforced until 1926, when the Calles administration decided to put the constitutional provisions into effect. This attempt was resisted so vigorously by the church and its supporters that an organized revolution broke out in the form of the *Cristero* rebellion.

As previously noted, one of the principal objections of the church has been to Article 3 of the Constitution, which secularized education.

33. Parkes, *op. cit.*, p. 176.

The government apparently had decided that it would be impossible to carry out the reform program so long as the church could prescribe the training for the children and use the schools as centers of propaganda against the government programs. As José Vaseoneelos, former minister of education and devout Catholic, is reported to have said:

As long as the Indian continues to believe that natural phenomena result from supernatural agencies, that drought and rain, insect plagues, and disease are consequences of divine whim and affected only by his piety with the priest as intermediary, it will be almost impossible to rouse him from his apathy, to make him self-reliant, dependent on his own initiative, to secure his co-operation to lessen the terrible infant mortality, to make him, in short, a civilized member of a modern community.³⁴

It is alleged that for similar reasons Article 3 was written into the Constitution to the effect that primary education must be lay education, free from religious influences and direction. When attempts were made to enforce this article in 1926, a pastoral letter was signed by the Mexican bishops and addressed to the Mexican people urging them to refrain from sending their children to the public schools. It read in part as follows:

As the law does not recognize the right of Catholic primary schools to impart the religious education to which they are obligated by their nature, we charge the consciences of the heads of families that they prevent their children from attending those educational plants where they will endanger their faith and good customs and where the texts violate the religious neutrality recognized by the Constitution itself.³⁵

Such warnings are said to have been issued repeatedly by local priests to their parishioners and have tended to place the church in a position of open rebellion against the orderly processes of government.

5. The personal conduct of some of the members of the clergy has sometimes been far from exemplary. At times, when strength of character and exemplary conduct on the part of the representatives of the church might have inspired confidence in the church on the part of government officials and laymen alike, the human frailties among the clergy were conspicuous—no more so than among the upper-class males of the general population, but perhaps more was expected of the representatives of the church than of government officials or laymen.

34. Quoted by Gruening, *op. cit.*, p. 243.

35. Quoted in Sánchez, *op. cit.*, p. 175.

After the vast conversions were made, the religious zeal died down a bit, and some members of the clergy became exceedingly mercenary, using their calling as a means of acquiring personal gain. Others became lax in their moral behavior and acted as though religion could be reduced to a few simple outward manifestations with little or no regard for ethics or morality. That such behavior became fairly widespread has been noted by too many observers to be questioned. A few observations from different periods will serve to illustrate.

In 1716 the Duke of Linares, viceroy of Mexico, wrote an *instrucción* to his successor, the Marquis of Valero, in which he said:

It is my duty also to inform you about the ecclesiastical body, both regular and irregular, whose members generally live in such a manner that although I am forced to mention their vices I draw the line at details; yet my forbearance is not justified by their actions, for they are the stumbling blocks of justice, with their scandalous licentiousness, which they flaunt, going so far as to point out their offspring. Not content with frequenting gambling-houses they have some of their own, where they also manufacture prohibited liquors and make the headquarters of scoundrels and criminals. To unburden my conscience and discharge my duty to the King, I have adopted the custom of calling their prelates and informing them of these excesses, but I have accomplished very little since the ecclesiastics of both missions and parishes are absolutely self-willed. For the sake of meekness and humility I do not mention names, but my heart aches with horror and discouragement because of the vices and the neglect of Christian education and care for the growth of our Religion.³⁶

Justo Sierra, who was minister of education for years in the cabinet of Porfirio Díaz, wrote in his work concerning the period of Benito Juárez:

The social leader was the bishop, the head of the clergy; the canons were next in order . . . indulgent toward all corruption, abuse, sins . . . toward the illegitimate family, spawned from concubinage, which swarmed in the city and in the parishes. Ecclesiastical celibacy was almost a myth. . . . This intervention of the clergy in the family adulterated its racial composition and gave to the population a lighter complexion. The houses were fragrant with incense but not with moral health; the homes were shrines of images. . . . Continual church celebrations, all resigned to earn little, to spend little, to exist in little comfort . . . the Indian lived and vegetated as his father before him; a little agriculture . . . insignificant crafts conserved without a single variation from father to son, and much drunkenness on all feast days . . . such was the woof of small community life.³⁷

36. Quoted in Gruening, *op. cit.*, p. 266.

37. Justo Sierra, *Juárez, su obra y su tiempo* (Mexico City, 1905-6), pp. 32, 33 (quoted in Gruening, *op. cit.*, p. 196).

A more recent appraisal of the conduct of the priests in a rural area is found in the important study of the valley of Teotihuacán by Manuel Gamio, who is a distinguished social anthropologist and at present is director of the Inter-American Indian Institute. At the outset, Gamio makes it clear that he and his associates had no religious prejudices and were interested in the functioning of the church in that area because they sincerely believed that it could be an important moral force in the rural communities. His conclusions nevertheless throw considerable doubt on the moral integrity of some of the priests in the area. He says:

The economic situation of the inhabitants is disastrous; and yet they are forced to pay exorbitant sums for obtaining the services which the Church should minister, if not entirely free of charge, at least at a low price: masses, funerals, baptisms, and marriages have such a high price that many persons do without them, in spite of their fanaticism. An example of this is the prevalence of concubinage due to the economic impossibility of the persons involved to contract marriage through the Church. . . .

Another aspect which is worthy of very special notice is the pretended celibacy of the priests. It is known to the inhabitants as well as to ourselves, who have directly observed it, that the priests generally lead a conjugal life. There is no doubt as to the harm which such a social abnormality causes the inhabitants. Of course the expenses which such a manner of living represent for the priests must perforce be paid by the parishioners. Furthermore, there is the imminent danger which menaces the wives and daughters of the trustful peasants, especially since the priest is believed to be invested with a divine character. Finally, the illegitimate children born from such unions are destined to bear a social stigma.³⁸

Lack of celibacy on the part of rural priests has been noted by many observers. A prominent Mexican educator recently told the author that in the late 1920's he was serving as rural-school supervisor in an isolated region in the Sierra de Juárez in the state of Oaxaca. One of his children was born while he was living with his family in one of the Oaxaca communities. In order to cement friendly relations in the local community which had previously been hostile to the educational program, he chose one of its prominent members to be the godfather of his child. It developed that the godfather's wife was a daughter of the local priest and was so recognized generally in the community. Through this family the supervisor became intimately acquainted with the priest and learned that the priest also had daughters in Oaxaca City. Because of lack of transportation and communication facilities, the local teachers were having difficulty receiv-

38. Gamio, *op. cit.*, I, xlvi. xlvi. Gamio reports that as a result of his study measures were taken to improve conditions in this area.

ing their monthly checks. The supervisor worked out an arrangement with the priest whereby a government check in payment of local teachers' salaries would be sent to one of the priest's daughters in Oaxaca City, and the priest would proceed to advance the cash to the local teachers in this isolated community. The supervisor reported that after intimate friendship was established with the priest all antagonism to the educational program in the area ceased.

It should be pointed out that in failing to observe the rules of celibacy the clergy were merely acting in accordance with the patterns of behavior that have been observed among many of the upper-class males in Mexico since the time of the Conquest. It will be recalled that the conquistadors came over from Spain without women and that they mated freely with Indian women. From that day to this, as pointed out in chapter xvi, many upper-class Mexican males have considered it as their prerogative to maintain mistresses outside the bonds of matrimony. These same males, however, would argue that a much higher standard of conduct should be expected of representatives of the church than of laymen.

The mercenary character of the services rendered by the local priests in Teotihuacán is attested by the following quotation from Gamio:

There have been terrible epidemics, droughts, collective disturbances, etc., in the region, and yet, never, or hardly ever, have we seen the local priests take care of the sick, give food to the hungry, or comfort the outcast. They devote themselves to rendering religious services in a mechanical fashion and only to those who are able to pay for them.³⁹

Obviously, the above characterizations cannot be applied to all the clergy. Hundreds of priests have devoted themselves to a life of hardship and self-sacrifice in an effort to improve the lot of the Indian masses. One need but mention such illustrious names as Quiroga, Gante, Zumárraga, Las Casas, and Sahagún to realize that the individual contributions of priests to Mexican welfare and civilization have been great. It is reported that among some of the Tarascan Indians of Michoacán the mere mention of the name of Father Vasco de Quiroga is enough to bring tears to the eyes of some of the inhabitants even today, so affectionately is he regarded for his work among them, even though this took place more than three hundred years ago.⁴⁰ The priests undoubtedly softened the Conquest for the Indian

39. Gamio, *op. cit.*, I, xlviii.

40. Sánchez, *op. cit.*, p. 42.

and, by proclaiming that he had a soul to be saved, reduced the suffering far below what it might have been otherwise.

Most of whatever educational facilities existed prior to 1910 must be credited to the church (see chap. xvii). As stated previously, the instigator of the movement for independence from Spain was a Catholic priest, Father Hidalgo, whose name is honored in history as the Father of Mexican Independence. Throughout Mexico's history there have been fearless and outspoken priests who have denounced in unmistakable terms the mercenary tendencies and the licentiousness of their fellow-clergymen, as well as the excessive exploitation of the Indians by the church. Consider, for example, the following excerpts from a letter written as early as 1556 by the second Archbishop of Mexico to the Council of the Indies in protest against the extravagances of the monastic brotherhoods:

Some cheek should be put upon the extravagant expenditures, excessive personal services, and sumptuous and superfluous works for which the monastic brotherhoods are responsible in the villages of these Indians, entirely at the cost of the latter. Some of the monasteries in places where there are not more than two or three monks would be inordinately superb even in Valladolid. . . . The Indians are driven there like beasts of burden, five or six hundred of them, without pay or even a mouthful of food, and compelled to come four, six, and twelve leagues to work. . . . I have seen two monasteries, one of which must have cost eight or ten thousand ducats, the other a little less; both were finished inside of a year, by the money, sweat, and personal labor of the poor. Some Indians die of the scant food and of this work to which they are not accustomed . . . and if the Indians do not come they are thrown into jail and whipped. Moreover, it is entirely common to see richer ornamentation . . . than may be found in the chapel of Your Majesty. The personal service of these Indians in the monasteries is excessive; they serve as gardeners, porters, sweepers, cooks, sextons, and messengers without receiving a penny. . . . And the cost of all these edifices and of the rich and superfluous adornment is secured by assessments levied upon these wretched people. . . .⁴¹

Unfortunately, the influence of these courageous and humane priests did not carry sufficient influence to prevent the church from acquiring the reputation in Mexico of exploiting in this life the very individuals whom it would save for the next.⁴² This reputation became so widespread that many middle- and upper-class adult males have little to do with the church. They will tell you confidentially that they are Catholics and that they believe in the church, but that they have little confidence in the priests. Among these classes it is

41. *Documentos inéditos de Indias*, IV, 519, quoted in Gruening, *op. cit.*, p. 174.

42. Sánchez, *op. cit.*, p. 168.

largely the women who attend church services. The men go only on special occasions.⁴³ It is against the background of this reputation that the antichurch laws must be considered in order to understand the reason for their existence.

THE PRESENT OUTLOOK

The government in recent years has been rather lenient in enforcing some of the more severe antichurch laws. Soon after assuming office, President Avila Camacho let it be known that he believed in religion by declaring *Soy creyente* ("I am a believer"). President Alemán shows no tendency to foster antichurch activities. Nevertheless, there is definitely lack of co-operation between government workers and priests in rural areas, and this often results in neutralizing the efforts of both. Often outright conflict of purposes and methods is found.

The author is of the opinion that the antagonism which exists between governmental and church agencies is still one of the most serious obstacles to rural development that exist in Mexico. It has the effect of dividing the human resources of the community into opposing groups, with the result that the peasant is bewildered. Religion could be a most powerful force in the rural communities of Mexico for bringing about improvements in the standards of living. The Indian, by long tradition, has a mystical outlook on life and a profound respect for the priest as a mediator between the supernatural forces and himself. He is very devout. If the local priest would openly espouse a program of sanitation, of housing, or of education or would merely co-operate wholeheartedly with federal or state agencies which are undertaking such programs, the success of such undertakings would be practically assured. Nevertheless, directors of such programs have told the author repeatedly that they feel very lucky indeed if the local priest refrains from actively opposing their programs, to say nothing of lending them active support. The rural priests in Mexico today, for the most part, look backward to the supposed golden age of the past when the church enjoyed wealth, prestige, and political influence. The heroes of Mexican Independence and of the Revolution are frequently looked upon as villains. Church leaders often speak apologetically of the work of Father Hidalgo and of Benito Juárez, and they idealize such characters as Iturbide and

43. This distinction is not common among the Indians. In some areas Indian men go to church about as often as do Indian women.

Don Porfirio. They have tended automatically to brand most government-sponsored programs with the stigma of "communism."

When asked what they considered the greatest problem facing Mexico today, several priests responded that they considered the infiltration of Protestant missionaries into the country as the greatest problem.⁴⁴ The author has seen printed posters on country church doors warning the peasants to beware of the Protestants, who come as wolves in sheeps' clothing to destroy their religion, asserting that this would be the greatest calamity that could befall them. The emotions of the humble parishioners have been fanned until, in several instances lately, they have burst into a flame that resulted in the lynching of Protestants.⁴⁵

One is led to wonder whether or not some competition in the field of religion might not stimulate efficiency. Does a monopoly in the field of religion tend to have the same effect with regard to efficiency as it does in the business world? There are a number of prominent Mexicans, some of them devout Catholics, who are beginning to wonder about this. They are beginning to believe that a little competition in religion might stimulate a true spirit of service on the part of church men.⁴⁶ They suggest that the priests worry less about Protestantism and more about playing an active role in the life of the community so that there would be no need for Protestantism.⁴⁷

There are signs of a spiritual and social awakening among a few of the younger Mexican priests of today. They are suddenly discovering that there is a tremendous field for service within the framework encompassed by the avowed ideals of the Mexican Revolution. The director of Mexico's newly established Soil Conservation Service, for example, reports that several of the younger priests are co-operating with him in teaching the Indian the necessity for soil conservation. One forward-looking priest has organized Catholic youth groups in

44. It was noted in the beginning of this chapter that less than 1 per cent of Mexico's population are Protestants.

45. Two such cases were reported in *Excelsior*, May 29, 1945. Others have been reported in *Hispano americano* since that time.

46. See, for example, the recommendation from Dr. Gamio after a thorough study of the functioning of the rural church in the valley of Teotihuacán (*op. cit.*, I, xcix).

47. What little success the Protestants have realized in making conversions in Mexico seems to be due, in large degree, to the emphasis they have placed on community improvements, such as providing medical service, sanitation, education, and improved living conditions. The Catholic priests attribute the success of the Protestants to greater laxity on the part of government officials in enforcing the "antichurch laws" against the Protestants than against the Catholics. There may be some truth in this also.

various states of Mexico, and under his direction the youth of the church are being taught the importance of sanitation, cleanliness, and wholesome recreation as important aspects of the spiritual welfare of the rural communities. By forgetting the conflicts of the past, these priests are finding satisfaction in taking the rural problems as they find them today and looking toward the future for their solution. Some express the opinion that if rural priests generally could catch the spirit and enthusiasm of this small group and could receive efficient training that would qualify them to take the initiative in promoting and encouraging programs of rural welfare, they would not need to worry either about governmental restrictions or about Protestantism. They could make themselves and their work indispensable to the rural communities. It is asserted that such activities need not detract from the more strictly spiritual aspects of their work. On the contrary, there is reason to believe that participation in activities for local community improvement would strengthen the entire religious program.

The Sinarquista Movement

THERE probably has been no movement in the Americas within the last decade that has aroused more interest and concern on the part of Mexicans and residents of other American countries than has the Sinarquista movement. Having started in 1937 with only four members who met secretly and drew up the outlines of the organization, the movement grew so rapidly that in 1944 it claimed a membership of over 900,000 persons. Its avowed objectives were to restore the Christian social order and to liquidate some of the results of the Mexican Revolution.

The activities of the Sinarquistas are looked upon from widely different viewpoints by outside observers. Some have branded the organization a giant fifth column, organized to serve the interests of the former Axis powers through the intermediary channels of the Spanish Falange. Others have viewed it as Mexico's greatest hope for bringing about a truly Christian democracy in a country where freedom of religion is said to have been suppressed. Between these two extremes many other viewpoints range from mild approval to mild condemnation. The Mexican government took action against the organization on June 22, 1944, on the grounds that it was carrying on subversive activities and plotting for the overthrow of the government. This action was precipitated by two articles which appeared in the official Sinarquista weekly newspaper, *El Sinarquista*, for June 22, 1944. One of these was interpreted by public officials as an open invitation to the army to rebel against the government. The other was a blanket condemnation of the government as administered by President Manuel Avila Camacho. As a result of these articles the organization was forbidden to hold public meetings, and the official newspaper of the organization was suppressed. Because of this action the organization went underground.

The future of the movement is problematical. After the govern-

ment took action against the organization in June, 1944, it received little public attention until May 20, 1945, when a national gathering of Sinarquistas was held in the city of León, Guanajuato, where it is alleged that 50,000 Sinarquistas were in attendance.¹ New leaders were designated, and the members pledged themselves anew to carry out the objectives of the organization. More recent reports indicate that the organization is still in existence, although its influence on Mexican affairs has declined greatly.

Our interest in the Sinarquista movement stems from the fact that the vast majority of the members were recruited from the rural districts and from the observation that it is the socioeconomic conditions existing in the rural areas that have made sinarchism possible. Whether the movement revives or completely disappears, it would seem worth while to examine it because the social conditions in rural Mexico which gave rise to sinarchism might well give rise, unless they are remedied, to similar organizations at any time in the future. The major part of this chapter deals with the origin, growth, organization, and explanation of sinarchism as it existed prior to 1945. Only brief reference is made to its activities since that time.

ORIGIN OF SINARCHISM

There are two versions as to the origin of sinarchism in Mexico. The official version is that it was founded on May 23, 1937, in the city of León, Guanajuato, when a group of friends, disturbed because of the moral, political, and economic disorder obtaining in the Republic, decided to form a union which would fight to restore in Mexico the Christian social order. These friends were three young lawyers—Manuel Zermeno, José Trueba Olivares, and Salvador Abascal—who met with a young farmer, José Antonio Urquiza, Jr. The official name given to the new organization was the Unión Nacional Sinarquista ("National Sinarquista Union"). It is explained that the term *Sinarquismo* ("sinarchism") is the antithesis of "anarchism" and means "with order." Hence it is alleged that sinarchism is a civic movement of lay Catholic membership which seeks the restoration in Mexico of the Christian social order destroyed by anarchy.

The other version of the origin of sinarchism does not dispute the time or the place of the official version, nor does it question the participation of the above-mentioned persons. It claims, however, that there were other persons present, including a German professor of

1. *Excelsior*, May 21, 1945.

languages at the University of Guanajuato, by the name of Hellmuth Oskar Schreiter. It contends that the Sinarquista movement is an outgrowth of an organization known as the Anti-Communist Center (Centro Anti-Comunista), established by Hellmuth Oskar Schreiter in 1936 in the city of Guanajuato.² It is claimed that this center was not achieving the success for which its founder had hoped and that he met with a few friends in 1937 and decided to reorganize along slightly different lines. According to Gill, the Trucba Olivares brothers, Torres Bueno, Manuel Zermeno, and José Antonio Urquiza, Jr., were all former students of Schreiter. He claims that young Urquiza had just returned from Spain, where he had fought on the side of Franco against the Republicans and was able to furnish information about the organization of the Falange and the Italian Fascist party. Schreiter could contribute information on the National Socialist party. It is claimed that out of this conference a movement was organized along hierarchical lines and based on militaristic procedures, subject to the will of a *caudillo* or *jefe*, and christened with a word that had never been heard before in Mexico: *Sinarquismo*.³

That some of the leaders of the Sinarquista movement were associated in some way with Hellmuth Oskar Schreiter, there can be no doubt. This is demonstrated by a legal document, dated September 15, 1938, in the city of Guanajuato, signed by Hellmuth Oskar Schreiter and by Manuel Torres Bueno, who later became the national Sinarquista chief, as his lawyer. A photostatic copy of this document is reproduced in *Tiempo*, April 21, 1944, on page 8. This document has nothing to do with sinarchism, but it does serve to show that there was a personal association between the two men. When confronted with this document and with the alleged connection of Schreiter with the Sinarquista movement, Manuel Torres Bueno, the former national Sinarquista chief, responded:

Regarding the proofs mentioned to show the connection of Schreiter with sinarchism . . . in 1938, the war had not yet started nor were there any United Nations, and our country had friendly relations with Germany. At that time it was not known that the Communists would soon join the Nazis to destroy Christian Poland. In 1938 Schreiter was an individual like so many others, and it means nothing now, as it meant nothing then, that he may be found occasionally among the persons who requested my professional services.

Maldonado, Schreiter, and Guzmán Valdivia had founded in the City of

2. Mario Gill, *Sinarquismo—su origen, su esencia, su misión* (Mexico City: 1944), p. 67; see also *Tiempo*, April 21, 1944, p. 8.

3. *Ibid.*, p. 67.

Guanajuato the Anti-Communist Center, something completely different from sinarchism which was founded in León in 1937 by Catholic elements. The proximity of dates and places has been artificially exploited to confuse these two organizations, completely different in their components and in their objectives.⁴

Whether or not Schreiter actually played any part in founding the movement the author is unable to say, since conclusive proof of this has not been established. There is, however, strong evidence that in the early stages of the movement there was rather close association between the alleged founders of sinarchism and the founders of the Anti-Communist Center, of which Schreiter was admittedly a member. This is indicated by the fact that Guzmán Valdivia, admitted by Torres Bueno in the foregoing quotation to have been associated with Schreiter as one of the three founders of the Anti-Communist Center, was a frequent contributor to the early official Sinarquista publications.

Thus the early objectives and associations of the leaders were such that use was probably made of some of the techniques and experience derived from Spain, Italy, and Germany, whether deliberately used to promote the interests of these countries or not. This will become more apparent as the discussion proceeds.

THE NATURE OF SINARCHISM

In order to account for the rapid growth in the number of adherents to sinarchism, it is necessary to summarize the basic features of the movement.

SINARCHISM IS A PROTEST AGAINST THE EXCESSES AND FAILURES OF THE MEXICAN REVOLUTION

The vast majority of the Sinarquistas are rural people, whose problems are closely related to the land and to agriculture. In some areas of rural Mexico there has been serious disappointment with the "Fruits of the Revolution." In these areas a great deal of land has been redistributed, but the standards of living of many peasants are still little different from what they were twenty years ago. In some instances the *políticos* have cleverly manipulated the Revolution to their own advantage and have grown wealthy at the expense of the humble peasants, who, trusting implicitly in the ideals of the Revolution, have not known how to defend themselves against the exploiters. The agrarian program has been least successful in some of the areas where sinarchism has flourished most. The Sinarquistas, for example, claimed

4. Unión Nacional Sinarquista, *El Sinarquista*, No. 270, April 27, 1944.

to have the largest following in the states of Guanajuato, Querétaro, Michoacán, Jalisco, and Guerrero. It would be difficult to find five other states in the Republic in which the agrarian program has experienced greater difficulty than in these states. As has been stated in an earlier chapter, practically the only source of agricultural credit for the ejidatarios is through the Ejido Bank. In recent years the bank has made a practice of extending credit only to those areas in which there appears to be a reasonable chance of recovering the loans; hence a fairly good index of the success of the ejido program is to be found in the relative amount of credit extended by the bank. Although 21.6 per cent of the ejidatarios in the Republic are found in these five states, they received only 11.9 per cent of the funds loaned to ejidatarios by the Ejido Bank in 1941. It seems reasonable to assume, therefore, that, as compared with the rest of the Republic, the Ejido Bank does not appear to consider the ejido program in these five states established on a sound enough basis to warrant risking any great amount of funds.

Another index of the welfare of the population is that of illiteracy. From the standpoint of illiteracy in the rural districts, all but one of these five states (Jalisco) is considered somewhat of a national problem because the relative proportion of illiterates is higher than the national average. The percentage of illiteracy in 1940 for all localities in Mexico having less than 10,000 inhabitants was 61.1. The corresponding percentages in states where sinarchism is most prevalent were: Guanajuato, 71.8; Guerrero, 75.9; Querétaro, 78.1; Michoacán, 67.1; and Jalisco, 53.0 (see Table 84).

Thus it would appear that sinarchism spread most rapidly in some of the states in which the agrarian program has experienced most difficulty. The founders of the movement capitalized on the plight of the peasant, the failures of the agrarian program, and the maneuvers of the unscrupulous politician very effectively to win converts to sinarchism. This is all vividly illustrated by the following quotation taken from the July, 1938, issue of *Sinarquismo* and entitled, "Peasant: The Revolution Has Betrayed You." Because of the forcefulness of the appeal and because the article contains many points of view concerning the Revolution that are held by important segments of Mexico's population, it seems advisable to quote in some detail.

Peasant: You were living in the peace of your fields when the revolutionary clamor reached your ears. . . . The shadow of a leader appeared before you; he was like you, of humble birth; like you, of dark complexion; like you, noble and brave. He said to you: "You are being exploited. The piece of land which was yours has been snatched away from you. Follow me." And you left the peace of

the fields in order to follow the leader. When necessary, your blood was spilled in the trenches. You wanted a less cruel life for your son, for your wife, for your father. You wanted to be free. That is why you went, with your arms, to the Revolution. A banner was unfurled before your eyes: "The Land Belongs to Him Who Works It." And another one touched your heart: "Land and Liberty." You, peasant, who loved the land, had a right to own it. You wanted to be the owner of the soil on which your perspiration fell. You wanted to own a pair of animals to plow the land with. You wanted to own the grains, the fruits of your labor. You wanted property in order to free your children from hunger. You wanted all that to which you have a right: bread, justice and liberty. And in the clouds above the battlefields where you risked your life, you saw your children plowing a land which was theirs and you saw them, smiling and well fed, enjoying a freedom which you were to conquer at the price of your blood. **THE LAND BELONGS TO HIM WHO WORKS IT. . . . LAND AND LIBERTY. . . .** These two ambitions prompted you to fight. And you loved the revolution which came in your aid, which promised to deliver you from slavery. And you followed the leaders with your faith, with loyalty. . . .

The fighting ceased. In the fields of the revolution you left the bloody bodies of your brothers, of your fathers, of your sons. You saw mobs of soldiers kill some of your people. You saw how, amid the noise of the battle, your women were violated, your huts were burned down. You experienced the sufferings of the revolution. But what did all those sacrifices matter if before you the promise was still shining: **LAND AND LIBERTY!** A promise which you were to make a reality, in exchange for your blood.

One day you returned to your field. The revolution became a government. **A GOVERNMENT FOR THE POOR**, you thought. A government which was to protect the weak, the exploited, the Indian. And you asked that government for land to be plowed, to produce crops for you, to enable you to buy clothes to cover your body and bread to nourish it.

And that government did not refuse anything. It replied: the land will be distributed. And it made you an ejidatario. You, on the other hand, must offer blind allegiance to the leader of your village. You, in exchange for what you were given, must join the political demonstrations, must abandon your labors to receive the governor, the candidate for deputy, the future president, the figurehead who went for your votes. And you formed herds. And you became election fodder. You were caged in trucks so that you might go to vote for the new "redeemer" who continued to talk to you about "redemption." And the new redeemers threw at you pieces of meat for you to eat and offered you decanters of *mezcal* to render you unconscious. You were lowered to the rank of cattle. You were humiliated, in the manner in which a tame and defenceless ox is humiliated. But you continued firm. **LAND AND LIBERTY:** For these two things you sacrificed everything, even your pride.

You saw how the man from your own class, now a legislator, began to forget you. You saw how he was growing wealthy, how he was giving up his simple manner of speech, his humble clothes, his friendly gestures. And you saw him become the accomplice of your former masters. He was buying automobiles, drinking wine at the fashionable bars, squandering the money of the people.

When you reminded him of his duties, you received kicks and curses. You continued wretched, naked; but your "redeemer," on the other hand, had redeemed himself from poverty. Your apostles, the men who had sprung from your own class, were deceiving you. Yet you continued to wait for LAND AND LIBERTY. The large holdings were subdivided. The former owners were exiled. The huge haciendas ceased to produce. And they told you: There it is, for you, the land you work. The ejido emerged: a piece of land that you were to cultivate in common with your companions. A bank lent you money to buy seed. But the bank was full of overseers. They were not your friends. They were men who would profit from your poverty. . . . You knew that you were not able to use the land as if it belonged to you. The land was still another's. It did not belong to the hacendado. But it was not yours either. If you failed to observe discipline, you ceased to enjoy your *parcela*. Through the intrigues of your leader, sometimes you were deprived even of the fruits of your labor. You continued to be exploited and poor. You changed masters, that is all. . . . You were no longer a serf of the overseer, of the hacendado. But you were yet the serf of the plotters, of the greedy, of the politicians, loafers without an occupation, who live on the work of others. That is why you were forced to go to meetings, to democratic farces, to ridiculous masquerades. The revolution was beginning to betray you. The piece of land that had been offered to you was exploited by the revolutionaries to keep you tied, submissive, enslaved.

The revolution has betrayed you then, peasant. The land is not for him who works it, it is not yours. You are not free. It is not given to you, even though you bought it at the price of your blood. Today the collectivistic revolution is directed against you.

LAND AND LIBERTY: two words, peasant, which have been abused.⁵

After vividly portraying the failures of the Revolution and the corruption of government officials as described above, the Sinarquistas then painted an idealistic picture of sinarchism, portraying it as the one organization especially designed to save the peasant from the misery into which he had been plunged by the exploiters of the Revolution. The following quotations illustrate the nature of the appeal:

Peasant, the land must be yours!

All the peasants of Mexico, all the men who love the land, all those who cultivate the fields of the nation: proprietors, agrarians, laborers; they must all join sinarchism. Here, within our ranks, is their place. Here, in sinarchism, is the place of all those who own or hope to own a piece of the soil of the nation. Sinarchism is not a strange doctrine, designed by persons who are strangers to our people; Sinarchism is not a program of ideas devised in the office of a lawyer.

Sinarchism was born on the prodigal lands of the *Bajío*,⁶ it was nourished with

5. Fabian Carpio, "Campesino: la revolución te ha traicionado," *Sinarquismo*, No. 2, July, 1938.

6. The *Bajío* is an important farming region of Mexico, comprising parts of the states of Jalisco, Guanajuato, Michoacán, and Querétaro.

the ambitions and feelings and aspirations of our ranchers, of our humble laborers, of our patriots. You will not find in sinarchism, my friend, the go-between lawyer, the professional politician, the pedantic intellectual, the ideologist: you will find the warmth of the people, the sap of the people, the spirit of the popular mind. The peasants, the best men of my country, live in contact with the sweet, rough, fertile land of Mexico; those who live in contact with the rain, under the clear skies, those gave impulse and life to sinarchism. . . .

You want bread, justice, and happiness for your children. We want the same thing. You want the land to be yours. *YOURS ONLY*, like a woman with whom you are in love, like a woman who has won your heart. And the land must be yours, *ONLY YOURS*, only yours! like the woman. Not of the politician, not of the leader, not of the cacique, not of the exploiter, No! Yours! You have fought for it. You are still fighting for it. Because you do not want your children to suffer poverty; because you want corn and fire and peace in your *jacal*.

Come to us to fight for land. So that your wife may not lack clothes; so that your children may not lack bread in abundance; so that you shall not be denied anything. The land must be yours, peasant. That is why we have founded the Sinarquista Union: to defend all the men who work the land and wish to possess it. *POSSESS IT!* Beautiful words: they mean being a proprietor, an owner, a landholder, a free man. You should be an agrarian no longer. You must be a proprietor. You should no longer be a slave of others, but a free person. Peasants of Mexico: Come to sinarchism, the movement of the men from the fields, the movement of those who love the land and defend it and with it defend the Fatherland.⁷

The foregoing appeals were probably effective with those segments of the population who had experienced the abuses of the Revolution. To those who had seen politicians ride from poverty to wealth and riches on the high ideals of the Revolution, while leaving their constituents almost as deeply mired in poverty as before, sinarchism seemed to offer a way out.⁸ On the other hand, any reference to the many positive contributions of the Revolution was conspicuously avoided.

SINARCHISM IS A PROTEST AGAINST ANTICHRURCH LEGISLATION

The second avenue of appeal made by the Sinarquistas to the peasants was through protests to the restrictions placed on the church by the Mexican Constitution. In the successive attempts to curtail the political and economic activities of the clergy, the Mexican government finally placed the church virtually in shackles. This fact enabled the Sinarquistas to appeal to the peasants in the role of championing

7. *El Sinarquista*, No. 38, October 26, 1939.

8. For a discussion of corruption in government see the discussion of the *mordida* in chap. xxi.

the cause of religious freedom. Mexican peasants are generally devout and are reluctant to do anything which might jeopardize their good relations with the unseen spirits. The Sinarquistas portrayed the restrictions on the church as the work of governmental atheists and Communists seeking to do away with religion and to substitute communism in its place. Leaders of the movement look back to the colonial period as the "Golden Age" of Mexico. In a sense, the movement is a continuation of the struggle for power between church and state which has characterized so much of Mexico's history. It may be regarded as a sequel to the *Cristero* rebellion, which was an armed revolt against the government of President Calles when he attempted to enforce the antichurch laws.⁹

The church disclaims any official connection with the movement, and this is confirmed by the Sinarquistas themselves. Yet the leaders of sinarchism have been deeply religious. In almost every speech made and in almost all the official publications of the organization, the grievances of the church have been reiterated in detail; and whenever there has been any issue of conflict between church and state, the Sinarquistas have always supported the cause of the church against the government. They consider many of the official heroes of Mexico as villains who were traitors to the best interests of the country; and the villains of the Revolution are idealized as martyrs by the Sinarquistas. They claim that in Mexico "heroes, leaders, martyrs, reformers, and apostles have been created who in truth were greedy, mercenary demagogues and mystifiers. The blameless figures of the history of the Fatherland lie buried in deliberate oblivion. False idols stand on our pedestals. The day when in Mexico a real revolution shakes the sordid wretchedness of a century of darkness, there will be a demolition of statues and many 'glorious' names will be thrown onto the rubbish heap."¹⁰

While the church does not officially endorse sinarchism, there seems little doubt that the rural priests generally have looked upon the movement with favor and have given advice and encouragement to it. Since the leaders of the movement are devout Catholics and since the movement claims openly to be an organization of lay Catholics, it seems reasonable to suppose that the leaders would naturally tend to rely heavily on the advice of the clergy. This view is substantiated by photostatic copies of official Sinarquista correspondence appearing in

9. See chap. xix.

10. Silvestre Mancera, "Don Porfirio Díaz," *Sinarquismo*, No. 5, November, 1938.

a recent book on sinarchism in which activities and encouragement of specific priests are mentioned.¹¹

Questions such as the following have been presented before the peasants by Sinarquista leaders in such a manner that a negative response would be a foregone conclusion:

Do you agree to have the matters of religious worship in the hands of civil authorities?

Do you agree that our government should be atheistic?

Do you agree that marriage should be merely a contract under the exclusive jurisdiction of civil officials and authorities? Does it seem right to you that the law should deny marriage its character of a sacrament?

Do you agree to excluding the oath and substituting for it only the promise to say the truth, just because officially God does not exist?

Do you agree to have the Constitution deny the Catholic Church any legal capacity?

Do you agree to have Catholic priests confused with men of other professions and to have their high calling hindered by civil laws?

Do you agree to have local Legislatures—hardly ever well informed and always guided by animadversion towards the clergy—determine the maximum number of Catholic priests needed in each State?

Do you agree to denying foreign Catholic priests the right of practicing their calling, while at the same time political refugees are allowed to practice their professions?

Do you agree to denying Catholic priests political rights and preventing them from criticizing laws or authorities, when they are the ones who are responsible before God for the souls of their parishioners?

Do you agree that for opening new Catholic temples the permission of the atheistic government should be necessary?

Do you agree that official credit should be denied studies pursued in Catholic Seminaries?

Do you agree to have the Constitution, which should express the will of this Catholic nation, prohibit the formation of a Catholic political party?

Do you agree to denying the Catholic Church the right of exercising charity and that, when it does, the real estate devoted to charitable purposes should be expropriated?

Do you agree to preventing Catholic priests from inheriting from any person who is not a member of their family?

Do you agree that cases of violations of the constitutional provision placing the Catholic Church in chains should not be heard by a popular jury?¹²

The public schools have been singled out repeatedly as a target by the Sinarquistas and have been portrayed as organizations through which children would be taught to renounce the religion of their parents and to become Communists. In some areas peasant parents have

11. Gill, *op. cit.*, pp. 210, 391.

12. *El Sinarquista*, No. 246, November 11, 1943.

been literally frightened into keeping their children out of school entirely. Consider, for example, the possible effect on the peasants of the following bold headline appearing in the Sinarquista weekly newspaper on January 6, 1944:

SOVIET IMPERIALISM IN THE SECRETARIAT OF PUBLIC EDUCATION!
WE WILL OPPOSE SOCIALISTIC EDUCATION! AS PARENTS WE
SHALL KNOW HOW TO DEFEND OUR CHILDREN!

In the issue of January 27, 1944, the bold headline appears as follows:

DEATH BLOW TO FREEDOM OF INSTRUCTION! THE SCHOOL PROGRAM
FOR 1944 IS A VERITABLE DICTATORSHIP!

Then follows an article which concludes with these paragraphs:

A real offensive is being planned against the freedom of teaching. An old national problem is brought to a crisis. We must face it with full consciousness of our duties. To bring up our children in the faith of our forefathers is not only a right but one of the most sacred of duties.

Parent: shake off your drowsiness, put aside that criminal indifference which leaves your children at the mercy of those who wish to poison their conscience. Yours and only yours is the duty of taking care of them and on you falls the responsibility of guiding them through the good path. Defend your rights and fulfill your duty. Fight against the communists who wish to snatch away your children!¹³

In *El Sinarquista*, May 4, 1944, we find the following statements concerning the school:

We deny, and will continue to deny, the right of the State to educate the children of the Mexicans in accordance with the dictates of its fancy. . . .

. . . . The socialist school has the advantage of frightening the people away from the educational centers. The Christian traditions of more than four centuries do not agree with the communistic pretensions of the Revolution, so that the socialist school does not enjoy the confidence of Mexicans, who prefer that our children do not attend any school rather than see them misguided and confused in their faith.¹⁴

The effect of Sinarquista propaganda on school attendance is illustrated by the following incident. Early in 1944 the author visited the village of Totimehuacán in the state of Puebla. The village has about 1,500 inhabitants. There are about 371 children of school age in the community. There are three teachers and three large schoolrooms. On the day that the author visited this community there were only 29 pupils in attendance in all three rooms combined. When he asked the

13. *Ibid.*, No. 257, January 27, 1944.

14. *Ibid.*, No. 271.

reasons for the poor attendance, he was told that the Sinarquistas were organized in the community and were constantly agitating against the public schools, denouncing them as communistically controlled. This frightened many parents into keeping their children out of school. The author talked with each of the teachers at some length, and each assured him that all three were good Catholics and knew little or nothing about communism. The Sinarquistas apparently did not investigate the teachings of these particular teachers but applied blanket condemnation to all public schools. The need for education in this community is apparent, since 75 per cent of all persons ten years of age and over in the municipality can neither read nor write. Yet only 15 per cent of the children of school age were in school on the day of the author's visit.

also strengthened when they see Anglo-American women strolling down the streets of some of the Mexican towns dressed only in shorts and halters or when they see specimens of North American womanhood "dead drunk" at some of the more fashionable hotels. Such practices are considered highly immoral by the Mexicans.

The fears of some Mexicans lest the Anglo-American culture displace their Spanish heritage has led the Sinarquistas to eulogize Spain and to denounce the United States. They denounce Soviet Russia and communism even more, and they regard both communism and Anglo-Saxon culture as a threat to their cultural heritage. Such an attitude provided fertile soil for the Spanish Falange, which undoubtedly exerted a strong influence during the early period. A vivid illustration is found in an article published in *Sinarquismo* in April, 1939, by Guzmán Valdivia, entitled "Cuál debe ser nuestra lucha" ("What We Should Fight For"). This article reflects strongly the point of view of the Spanish Falange in glorifying Spain and advocating the "spiritual reconquest of Latin America." It denounces both the United States and Soviet Russia as imperialistic, while remaining silent about Hitler and the Nazis, even though it was written during the post-Munich period. It seems advisable to quote it at some length:

All those who have been interested in dignifying the life of Mexico, as well as those who have tried to point out the way to achieve the true aggrandizement of the country, are turning to Spain, and more concretely, to the work accomplished by the Mother Country during the colonial period. . . . Mexico needs to affirm its traditions in order to find the meaning of its future. Thus it is that the return to Spain is desired by those who feel the desperate uncertainty that floats so densely and heavily over the nation, and these valiant defenders of the honor and prestige of our country well realize that the forsaking of our traditions is the cause of our present misfortune and may be the cause of irreparable social disintegration. . . .

The present . . . is opposed to our past. The main values of Hispanic culture have been replaced by the fundamental principles of Anglo-Saxon culture. The profound spiritual ideals have been exchanged for economic utility. We severed our ties with Spain in order to adopt the Yankee way of life, and its necessary extension, bolshevism. Therefore, to defend Spain and to defend Mexico is to fight against the degrading influence of both the Anglo-Saxon and the Communist.

The facts prove this: from the time when the independence movement was initiated until the revolution started in 1910, we heard first the insinuations and later the open dictation and the sharp commands of Yankee imperialism which, in order to dominate Mexico economically, destroyed the traditional values with its propaganda of hatred towards Spanish culture. Later, as a necessary consequence, Madero and Carranza prepared the way for Calles to initiate and Cárdenas to accomplish the enslavement of the people in the name of socialism

which finally has shown a decided Communistic tendency. The policy of the United States and the interference of the Komintern, apparently two contradictory tendencies, are two aspects of the same action against the culture which we inherited from Spain. And what is most regrettable in our present situation, and at the same time the greatest handicap for the defenders of our destiny, is the veiled deceit, the hypocritical complicity of North American capitalism with the Bolshevik imperialism of the Third International. We suffer all the anxieties of an artificial dilemma, of a false conflict, without realising the perfect unity of these tendencies.

. . . . The Fatherland is degraded and destroyed just as much by the rightist influence of the Anglo-Saxon as by the leftist one of the Marxist. Those who love Mexico, the genuine defenders of our traditions, must give battle—and they are already giving it—in both fields, showing above all the inviolable faith inspired by every noble and sacred cause. We fight against all adversities. In spite of all disappointments we march forward. Victory is for those who have faith, yes, faith in the destiny of Mexico!¹⁵

The following denouncement of the United States by Efraín López, printed in *Sinarquismo* in April, 1939, is also an illustration of the type of propaganda that would have found wholehearted indorsement by the Falange:

The "fight of fascism" is a stake of the imperialistic interests of the United States who wish to retain their markets in America, for which they seek the support of red agitators, which is granted by the latter in exchange for small concessions.

The imperialism against which we must fight is the real, spoliative, authentic imperialism of the "good neighbor"; the other one, the fascist one, is a remote and possible imperialism, but less positive than the one from which Spanish America suffers. . . .

Our real political freedom, our economic independence, our national sovereignty must be achieved in an open fight against "Poinsettism" and not through ridiculous outcries authorized by Washington.

We Mexicans must not forget what we learned in school, what we repeated in our geography class: "To the North, the United States!"¹⁶

In fairness to the Sinarquistas, it should be mentioned that they were not the only Mexicans who were critical of the United States at that time. The more conservative groups have been critical of the United States ever since the achievement of Mexican Independence. They are alarmed lest the mechanically more efficient culture of the United States ultimately smother what they regard as the more spiritual or aesthetic culture of Mexico. Many Mexicans still carry deep wounds in their national pride growing out of the fact that in the past

15. *Sinarquismo*, No. 8, April, 1939.

16. *Ibid.*

the United States annexed about half of Mexico's former national territory. They remember with deep humiliation the invasions of the United States armies and the sending of United States Marines to Veracruz. They display some apprehension lest similar events occur in the future. This feeling of concern on their part is intensified when they hear frequent reports of racial discrimination against Mexicans in Texas.¹⁷ The extreme left-wing groups also expressed anti-United States and anti-Anglo-Saxon sentiments during the early period of World War II, when Russia and Germany were operating under the terms of the Non-aggression Pact; but when the Germans broke the pact and attacked Russia, the left-wing group in Mexico shifted suddenly to a pro-Allied stand.¹⁸ Thus it is not necessary to assume Nazi or even Falange interference in order to explain the early attacks against the United States by the Sinarquistas. Such attitudes might have reflected merely the feelings of large segments of Mexico's population at that time.

It should be remarked that with the progress of the war the attacks against the United States by Sinarquista publications gradually diminished until little anti-United States sentiment was observable in them at the time they were suppressed in June, 1944. The attacks against Soviet Russia and communism, however, continued with increasing vigor throughout World War II.

APPEALS MADE TO THE POPULATION

In addition to emphasizing what they consider to be Mexico's most serious problems, the Sinarquistas have used various other devices for appealing to the peasants for support.

MARTYRDOM

The first norm of conduct for all Sinarquistas is stated as follows: "Hate the easy and comfortable way of life. We have no right to it while Mexico is unfortunate. Love discomfort, danger and death."¹⁹

Within one year after the founding of sinarchism the name of the first martyr to the cause was inscribed on the Sinarquista rolls. This was none other than José Antonio Urquiza, one of the original founders of the movement. His martyrdom was henceforth held up as an

17. Pauline R. Kibbe, *Latin Americans in Texas* (Albuquerque, N.M., 1946).

18. Betty Kirk, *Covering the Mexican Front—the Battle of Europe versus America* (Norman, Okla., 1942), chap. iii.

19. Unión Nacional Sinarquista, *Folleto para jefes* (Mexico City, 1941), p. 7.

example of the supreme sacrifice that must be paid in order that the movement might triumph over its enemies for the salvation of Mexico. Almost every issue of *El Sinarquista* since that time has contained some reference to the blood being spilled by Sinarquistas for the glory of God and country. "God requires the blood of martyrs for the salvation of Mexico."²⁰ At times it would almost seem that the Sinarquista papers have taken pride in recounting the bloody struggles between the Sinarquistas and the agrarian reserves. On October 17, 1940, an official song for the organization was proclaimed by the supreme chief, entitled "Faith, Blood, Victory" (*Fé, sangre, victoria*). It was stated that this song was to be sung at official gatherings of Sinarquistas, together with the national anthem.²¹ The official "Handbook for Sinarquista Chiefs" lists the names of seventy-five official martyrs to the cause of sinarchism.

Early in the movement the leaders made provision for taking care temporarily of the families of martyrs to sinarchism as a regularly accepted part of their program. They made a ruling to the effect that every member should contribute five centavos whenever they received official notice of the death of a fighter (*luchador*). The money was to be sent to the family of the "fallen," and anyone who did not contribute was deemed unworthy of sinarchism.²²

One of the songs in praise of Sinarquista martyrdom is entitled *Sinarquistas! Arriba la sangre!* ("Sinarquistas! Hurrah for Blood!"). It contains the following words:

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At times, it almost appears as though the Sinarquista leaders deliberately encouraged their members to antagonize their enemies into shedding their blood so that they could make use of martyrdom and persecution as an effective propaganda weapon. Note, for example, the following quotations from the official newspaper.

"What happiness to be a Sinarquista martyr!" our companions of Salvatierra said at the end. Onward, companions. It is by disdaining death that the life of the fatherland is conquered. . . .

We are pledged to defend our Fatherland and not our bodies.²⁴

USE OF SINARQUISTA SYMBOLS AND SLOGANS

A second appeal of sinarchism has been through the display of symbols in the form of flags, arm bands, special dress, parades, salutes, songs, and slogans. The Mexican Indian peasant has always taken great interest in symbolic representations as portrayed in the fiestas to the local *santo* and on many other ceremonial occasions. He is intrigued by the symbolism of the Sinarquistas, and this is probably one important factor in his being attracted to the organization. In the official Sinarquista salute the right arm extends across the breast, with the hand extending slightly above the opposite shoulder. Photographs showing hundreds of persons giving this salute in unison have been carried frequently in the Sinarquista publications. The official pass word is *Viva México!* The official flag is a red background containing a white circle and in its center a green map of Mexico, stamped with the letters U.N.S. (Unión Nacional Sinarquista). Arm bands are worn with this flag stamped on them. Flags are abundantly and conspicuously displayed at all demonstrations. There is a special type of dress designed for official gatherings, but most Sinarquistas are too poor to afford it, so they let the arm band suffice. The Sinarquistas have a repertoire of songs commemorating their martyrs and "fallen heroes" as well as the triumphs of sinarchism over its enemies. Military terms are used throughout the organization. All Sinarquistas are referred to as "soldiers," their leaders as "chiefs."

SELF-SACRIFICE

A third appeal of sinarchism to the Mexican peasant, and probably one of the most effective, is the apparent sincerity and spirit of self-sacrifice displayed by its leaders and propagandists. For the most part, these are young, intelligent men who have abandoned their pro-

24. *El Sinarquista*, No. 79, August 22, 1940.

fessional careers for the purpose of participating in what they regard as one of the greatest crusades of modern times. They traveled throughout the country, organizing committees, talking with peasants, and building up an organization which would reach out into the more remote rural districts. They were humble in appearance and underwent sacrifices by living with the people and sharing in the hardships endured by the peasants.²⁵

The rapidity of the conversions exceeded all expectations. By 1941 they claimed a membership of 500,000 and, by 1944, more than 900,000. It is quite possible that the total number of members reached more than 1,000,000. If this is true, it means that about one out of every twenty persons in Mexico became a Sinarquista. It is claimed that about 90 per cent of the members are located in the rural districts. The membership is distributed in every state and territory in Mexico, although the vast majority of the members are found in the central region. The areas where the ejido program has been most successful have remained almost untouched by sinarchism. Very few Sinarquistas, for example, are found in the Laguna region, the Yaqui Valley, the Mexicali Valley, or in the Soconusco region of southern Chiapas. Comparatively few are found in any of the northern states of the Republic. There are a few among the inhabitants of Mexican descent in the southwestern states of the United States, mostly in California and Texas.

It is said that the requirements for membership have been (*a*) Mexican descent, (*b*) nonmembership in the clergy, (*c*) willingness to abstain from all alcoholic beverages, and (*d*) willingness to spill one's blood for the cause of sinarchism, should this be required.²⁶

THE SINARQUISTA ORGANIZATION²⁷

The Sinarquistas are organized according to an authoritarian and militaristic pattern wherein the chiefs of the organization make all the decisions and the rank and file of the members obey orders. There is not the slightest element of democratic procedure in the organization. This is emphasized over and over again in the "Handbook for Chiefs," the official handbook of the organization:

There should be no discussions in the assemblies. All decisions should be made by the Chief, who may request the advice of the members of his Committee; if

25. Kirk, *op. cit.*, pp. 317, 318.

26. *Ibid.*, p. 318.

27. The organization is described here as it existed in 1944. Much of the material is taken from an official and restricted publication, entitled *Folleto para jefes* ("Handbook for Chiefs," published by the Unión Nacional Sinarquista).

10. Pray to God for those of us who fight and think of a new and free Fatherland. LONG LIVE MEXICO!³¹

THE SELECTION OF OFFICERS

How are the officials of the Sinarquista organization selected? From their official publications it would appear that the national chief chooses his successor, presumably with the aid of a secret committee, and that all other officers are appointed by the chiefs. In no case does the general membership have anything to say about either the choice of officers or the program which is to be followed. Until 1944 there had been four national chiefs during the short history of the organization—José Trueba Olívares, Manuel Zermeño Pérez, Salvador Abascal, and Manuel Torres Bueno. In March, 1945, Gildardo González Sánchez displaced Torres Bueno as chief. The reasons for the shift from one to the other are shrouded in secrecy. When Manuel Zermeño Pérez handed over the office to Salvador Abascal, he made the following remarks:

In the month of March, 1938, José Trueba placed in my hands the leadership of the national Sinarquista movement. Today I have resolved to turn the command over to Salvador Abascal, after a long and deep meditation. . . .

I have the inmost conviction that Salvador Abascal is the man predestined by God to lead us and with a heart full of happiness, of enthusiasm and of faith I turn over to him the position of Chief of Sinarchism.³²

All Sinarquistas were then urged to accept the new leadership with utmost confidence: "Of us, the soldiers, only one thing is expected: to accept his decision and to follow the conduct which he himself, who is our model, has just taught us, that is, to place our entire faith in him who since today is our Chief."

Thus it would appear from the above quotations that each national chief selects his own successor. The author has been told by Sinarquistas, however, that actually it is the secret committee which selects and replaces the national chief. Such a procedure is also reported by Gill.³³

The Sinarquista publications emphasize repeatedly the point that the organization is to be highly stratified, with a definite hierarchy of officers, each taking orders from his superior. The rank and file of the members are urged to have implicit faith in the officials and to render strict and prompt obedience to all instructions. The members are giv-

31. *Ibid.*, p. 8.

32. *El Sinarquista*, No. 78, August 15, 1940.

33. *Op. cit.*, pp. 95, 96.

en to understand that men are not equal and that each has a place in the organization according to his inequality:

The authority which on earth is exercised by men to govern their fellows has a solid foundation: God, which is the source and sustenance of all human power. . . .

. . . . The absurd equality of liberalism and of anarchism has disappeared. Now each one has his place in accordance with his personal inequality before his fellow men. Each one has a task to perform by himself. All obey superior orders and feel the responsibility of their actions before God and before the Fatherland. If you wish to know how to command, learn first how to obey; this should be the rule of every Sinarquista.³⁴

Thus is and thus should be sinarchism: hierarchical, disciplined, impersonal.

Yesterday Zermelo, today Abascal, and tomorrow whomever God may designate for the complete realization of our work, which is the salvation of Mexico.³⁵

The type of obedience required is illustrated in the following example, entitled "How Sinarquistas Must Act at This Moment":

Tomás González, Chief of Sinarchism in Pátzcuaro, said: "We will go wherever the chiefs take us and will willingly follow the steps prescribed for us; we will fulfill faithfully the orders given to us and will maintain discipline because we have faith that the path marked for us by the chiefs is the road to salvation. . . ."³⁶

Not only do Sinarquistas have no voice in choosing their own leaders, but they are urged by their chiefs not to vote in national or local elections. This is said to be because they do not believe that the vote is respected in Mexico. There is ample evidence to suggest that they do not even believe in the right of the people to choose their officials. This is emphasized in the following quotations:

Nothing is settled by voting; on the contrary, everything is unsettled. . . .

Universal suffrage is a madness which had inevitably to produce the viscious procedure which we have described: that of hypocrisy.³⁷

Furthermore, the Sinarquista paper has carried many times in a conspicuous place the following statement: "Sinarchism struggles for the restoration of the Christian Social Order. Liberal democracy, as well as Nazi-Fascism and communism, is contrary to this order."³⁸

34. *El Sinarquista*, No. 274, May 25, 1944.

35. *Ibid.*, No. 81, September 5, 1940.

36. *Ibid.*, No. 63, April 25, 1940.

37. *Ibid.*, No. 79, August 22, 1940. Apparently their attitude concerning voting has changed somewhat since 1945, and a Sinarquista was elected to the national Chamber of Deputies in December, 1946.

38. *Ibid.*, June 4, 1942.

MILITARY ASPECTS OF THE ORGANIZATION

Sinarquistas are organized along military lines, are drilled in military discipline, and carry out in military style the "peaceful" conquests of cities and other officially designated "military" objectives. They do not use firearms—these are strictly forbidden in the official handbook. It is believed by the leaders that the use of arms might incite their enemies to undue violence and might culminate in a civil war similar to that resulting from the *Cristero* rebellion. That military training is a fundamental part of their program, however, there can be no doubt. The members are organized according to the following specifications:

Each Municipal Chief should organize his people at once in *Cuadros*, *Centurias*, and *Compañías*.

The *Cuadro* consists of a Chief of *Cuadro*, an Assistant Chief of *Cuadro* and thirty soldiers, in six rows of five men each, numbered from one to six. The man who goes at the extreme right of each row is called the Guide and the four other soldiers shall fall in line with him. Each Guide has the same number as the row to which he belongs.

The *Centuria* consists of a Chief of *Centuria*, an Assistant Chief of *Centuria*, a First Assistant of *Centuria*, a Second Assistant of *Centuria*, and three *Cuadros*. Total: one hundred men. . . .

The *Compañía* is a unit composed of three *Centurias*, four Liaison Officers, and a Chief and an Assistant Chief of the *Compañía*. When marching, there should be a distance of three meters between one *Compañía* and another, so that they might be easily distinguished.

The *Cuadros*, *Centurias*, and *Compañías* of the city should be formed using the organization of *jefaturas* into blocks, sectors and zones. The *Cuadros* and *Centurias* of peasants should be formed utilizing the organization of the Rural Sub-Committee. . . .

At the head of each column should go the Chiefs of the highest category which might be there at the time, marching in the following manner: first the Chief and Assistant Chief of the column, accompanied by four Liaison Chiefs; then the two standard bearers and immediately behind a special *Cuadro* to protect them.

If there is any cavalry, it will march at the rear, four in a row, so that eight rows of four horsemen will form a *Cuadro*. If deemed convenient, the eight best horses will be selected to march at the head distributed in the following manner: first the Chief and Assistant Chief of the Column, preferably mounting black horses; immediately behind them, two other horsemen who will be the standard bearers, and finally a guard of four horsemen protecting the banners.³⁹

Detailed instructions are given concerning mobilization plans and procedures. These place great emphasis on the factor of surprise.

39. *Folleto para jefes*, pp. 19, 20.

Stress is also placed on the mathematical precision of the column movements, the marching, and the saluting of the head officers. The following instructions appear in the handbook:

The time of departure of each contingent should be designated bearing in mind the means of transportation and the time at which all contingents should meet for the peaceful conquest of the designated objective. For this purpose, *trust the strict punctuality* of all our soldiers; call them with the strictly necessary advance notice (from five to fifteen minutes) doing away once and for all with the false belief that Mexicans are not able to be punctual.

Everything **BY SURPRISE**, as a general rule. Anyway, lodging should be prepared and persons chosen for the various commissions on the basis of discretion. If convenient, the rank and file of the Sinarquistas of the city are summoned for the day of the function (men and women separately) in closed quarters, telling them that there they are to receive orders from chiefs superior to those of the locality, and it is then that they are told what is going to take place and they are organized rapidly.

Other rules for achieving surprise: not mobilizing the people of certain places, even though that contingent may be missing; when the situation is very serious, announcing the assembly in a different town, or with one or more days in advance, but provided there be no confusion among our people; **NEVER** inviting the public in general; counting exclusively on our people, to whom orders will be passed verbally. . . .

When the contingents are very strong, it is not convenient to summon them all at the same place, but rather at several places, combining the march in such a way that all the contingents reach the appointed place at the same time, or that they join each other with mathematical precision until they all form one column. . . .

During the progress of the march, contingents distributed at either side of the column, to protect it, salute the Chief with absolute uniformity, making the motion without saying a word, and then join the column at the rear. Before the column approaches, these contingents have the appearance of mere bystanders.

A place of absolute confidence should be prepared to take care of our wounded, with a physician and nurses of our own.

Few speeches, three or four at the most. Welcomes are unnecessary. To the point. Let no one offer to speak, and if anyone should do so, he should not feel hurt if he is not accepted. Women should not speak.

Once the assembly is over, the people should be dispersed rapidly and in order.

Above and before all, full faith in our success for God is with us.⁴⁰

The Sinarquistas have frequently tested out their tactics by organizing a surprise march on some city. Following is their own descrip-

40. *Ibid.*, pp. 18, 19, and 21, 23.

tion of their march on the town of Tacámbaro, in the state of Michoacán, on January 30, 1944:

Five thousand Sinarquistas attended the great concentration which took place on Sunday, January 30, in the square of Tacámbaro, Michoacán; it was done by surprise and caused consternation among the enemies of sinarchism.

This act was directed by the Regional Chief of Michoacán, Pablo Loeza, J. Jesús Sam López, member of the National Propaganda Brigade, and companion Higareda, Municipal Chief of Tacámbaro. The organization was most strategic and precise, and besides being a clamorous success it provided much experience in Sinarquista tactics.

At eleven o'clock in the morning three columns entered the town simultaneously from different points, in a concentric advance towards the square. These columns were made up of the rural members of the surrounding districts. The Sinarquistas of the town (the fifth column) had posts assigned in advance as well as a specific time at which they were to join the contingents from the outside. The order to advance was a stentorian *Viva México!* given by Chief Loeza and answered clamorously by five thousand throats in unison. Then we marched to the tune of our Fighting Son.

Once we were all gathered in the square, a meeting took place, full of sunlight and enthusiasm, almost rapture, at which Chiefs Loeza, Sam López and Higareda spoke to the Sinarquista *Centurias*.

Diputado Diego Hernández Topete, the military and civil authorities as well as the communists of the town, were present and listened to our speeches, but they controlled themselves and did not act arbitrarily as is their custom.

A new triumph has been set down by the Sinarquistas of Quiroga, Tzintzuntzán, Acuitzio and Tacámbaro. Onward!⁴¹

THE OBJECTIVES OF SINARCHISM

What do the Sinarquistas really want? This is a very difficult question for the outside observer to answer, first, because there are so many secret aspects to sinarchism that one never knows what is being withheld and, second, because one finds numerous apparently contradictory statements in their official literature which tend to confuse the issues. Many of the things they say they want would be considered praiseworthy in any modern democracy, although there is grave doubt that the means which they suggest for attaining them would actually result in their being achieved.

FREEDOM OF RELIGION

One of their principal avowed objectives is to have the governmental restrictions on the church removed so that the people of Mexico could enjoy religious freedom. Yet, from their official writings, one cannot escape the impression that freedom of religion to them means

41. *El Sinarquista*, No. 260, February 17, 1944.

special privileges for the Catholic church, even freedom to exert political influence, and, at the same time, severe restrictions on all other religions. The leaders continuously tell their followers that unity of belief is essential to the cause of sinarchism and that the entrance of other religions into Mexico tends to destroy the unity and the order which sinarchism is trying to establish.

. . . . National Unity is the result of unity of ideals, opinions, feelings and aspirations of the men who form a nation. But, above all, national unity is founded ON UNITY OF BELIEFS.

If Mexico has survived, in spite of the tremendous rendings which it has suffered during more than a century, it is due to the fact that its religious unity has not been broken. The day this happens, our Fatherland will have been definitely disintegrated.

Therefore: the Protestant sects conspire, obstinately and astutely, against OUR NATIONAL UNITY.

In order to maintain and strengthen the unity of the nation it is necessary to prevent the propagation of the sects. As long as the Catholic does not enjoy full freedom, Protestantism will continue to spread with damage to the spiritual integrity of Mexico.⁴²

Sinarchism considers that within the essence of Mexico is Catholicism and within Catholicism the true freedom, that is, the freedom of acting in good faith and embracing the truth.⁴³

The Sinarquistas openly demand not only religious freedom for the Catholic church but special privileges for it in relation to other churches:

We ask that the Catholic Church have in Mexico not only a decent position, such as it enjoys in any civilized country, but a position of privilege, such as it has a right to have on account of having been the builder of our nation.⁴⁴

During the greater part of the year 1943 almost every issue of *El Sinarquista* carried a special column attacking the Protestant religions. In this column appeared such charges as the following:

In the previous issue I pointed out that Protestantism is another of the means of propaganda of spiritualism; now I intend to show to all Sinarquistas something further on the propaganda and falsehood of this pseudo-religion, so that none of our companions may be deceived by these lies. . . .

. . . . Since Protestantism has always enjoyed the protection of the powerful, it has numerous means of propaganda and this is why Protestant propagandists

42. Unión Nacional Sinarquista, *Orden*, No. 2, October, 1942.

43. *El Sinarquista*, No. 274, May 25, 1944.

44. *Ibid.*, No. 245, November 4, 1943.

may express their ideas in nicely printed books and pamphlets, selling them for a trifle and even paying people to attend their religious ceremonies, as is the case in many Protestant temples in Mexico, which are attended by many poor persons not through conviction of the truth of the doctrines preached there, but guided by their interest in the coins distributed to them.⁴⁵

The Sinarquista magazine called *Orden* also carried anti-Protestant propaganda in almost every issue. Note, for example, the following quotations:

To make Mexico Protestant is a crime.

To protect the "missions" which come to preach the gospel to us is criminal complicity.

To favor these "religious invaders" is to do to Mexico the greatest injury, the strongest attack, the gravest offence, the most despicable treason.

Protestantism is a peril, a real and grave peril.

To neglect this peril is also "complicity," it reveals lack of love for Mexico.

It is necessary, it is urgent to organize a campaign against Protestantism. A campaign that will create a vacuum around them, that will close all doors to them, that will throw them out of the country. A truly Catholic campaign.

In the isolated mountains where the Indian lives, the "Protestant missionary" distributes medicines, money, making converts. In the Huasteca region, in Oaxaca, in Vera Cruz, in all regions of Mexico, they work intensely.

Mexicans: let us defend our Faith, let us defend our Fatherland!

The missionaries bring many "dollars."

We prefer a naked, poor, barefoot, sick Mexico to a "dollarized" [*dolarizado*] Mexico, rich but imbecile.

Catholics, save Mexico!⁴⁶

Thus one gets the impression that the particular type of religious freedom wanted by the Sinarquistas is one that would restore the Catholic church to its former position of power and influence but would ruthlessly suppress all other religions in Mexico.

THE SINARQUISTAS WANT LAND

Since the Sinarquistas want land, one might assume that they would be highly in favor of the principles of the agrarian program—but they are not. They are fundamentally opposed to the idea of expropriation of large landed estates for the purpose of providing land for the landless. They advocate the absolute protection of private property, large and small; but, since expropriation proceedings have already taken

45. *Ibid.*, No. 239, September 23, 1943

46. *Orden*, No. 25, October 5, 1944.

place and since ejidos have already been formed, the Sinarquistas are in favor of making the ejidatarios absolute owners individually of the land distributed to them. This would mean granting them a clear title, enabling them to use or to dispose of the land in any way they see fit.

As evidence of their good faith in wanting to provide land for their members and also to reclaim land that has not previously been developed for agricultural production, the Sinarquistas have undertaken a colonization scheme. They have attempted to establish colonies in the dry coastal areas of Baja California and Sonora in the northwest and in the dry coastal area of Tamaulipas in the northeast.

Just why they should have selected the dry desert areas as places to establish agricultural colonies when there are numerous tropical areas farther south which have plenty of moisture and which are definitely underpopulated, in comparison with other parts of Mexico, it is difficult to say. Several Sinarquistas have told the author that it was for the purpose of adding prestige to the Sinarquista movement. They argued that if the organization could take some of Mexico's most worthless land and bring it into efficient agricultural production, this would go far to demonstrate to the world that sinarchism really offered something besides beautiful theories.⁴⁷ Others are of the opinion that they chose sparsely settled areas near the border of the United States because they feared that colonists from the United States might filter into these areas and result in another "Texas" episode.

The two colonies which have received the greatest attention are María Auxiliadora near Magdalena Bay in Baja California and Villa Kino on the Gulf coast of Sonora.

1. *Villa Kino*.—The author made a personal visit to the Sinarquista colony at Villa Kino in 1943 and investigated the project in some detail. The colony was established in January, 1942, by nineteen families, fifteen of whom were from the vicinity of León, Guanajuato, and four from near Ciudad Hidalgo in Michoacán. The families all made the trip to the colony site together. It had been anticipated that many more would join the trek, but for unknown reasons only these volunteered. The colonists were conducted under the leadership of José Trueba Olívares, one of the alleged founders of sinarchism and its first national

47. Gill expresses the opinion that the original primary purpose was probably not agricultural production but rather to establish strategic locations on the coastal areas near the United States so that they could be of greater service to the Axis powers. He points out that the settlement in Baja California was situated near the Magdalena Bay and that the colonists left for this area on December 12, 1941, only 5 days after the Japanese attack on Pearl Harbor (see *op. cit.*, p. 162, and the magazine *Mañana*, Nos. 30 and 31, March 25 and April 1, 1944, respectively).

chief. He is a lawyer by profession and apparently at that time had had no experience in agriculture. The author was informed that the colonists were selected more because of their faith in sinarchism and their willingness to undertake hardships in the desert, for the sake of the cause, than for any experience they may have had with agriculture.

The colony is located on the desert of western Sonora, 56 miles southwest of Hermosillo, 8 miles inland from the Gulf of California, and 11 miles northeast of the Estero de Tastiota. The nearest settlement of any size is Hermosillo, the capital of the state, to which frequent trips are made by truck for groceries and other supplies. There are five or six cattle ranches between Hermosillo and Villa Kino, each with several families, but there are no towns. It seems that the cattle on these ranches graze on mesquite brush and other desert vegetation, since little or no grass was observed. The soil in the area appears to be good. It is not sandy and is said to hold moisture well, but irrigation is absolutely indispensable to the growing of any crops. The colony is located in an area which receives less than eight inches of rainfall per year.

On arrival the colonists found the place completely desolate. Arrangements had been made with an army general of Hermosillo to have a well dug and a small house constructed before the colonists arrived. The house had been built but had burned down. The well was dug but provided only enough water for drinking purposes, laundry, and for livestock; none was available for irrigation. The colonists erected makeshift huts in the desert from mesquite brush and cactus until more substantial structures could be erected. They purchased a few plows and with burros and mules they proceeded to plow up a sizable plot of land. They planted this to corn and beans, following the same methods they would have used in Guanajuato. They fully expected to raise a crop but were sadly disappointed. They claimed that there had been only one shower in the fourteen months since their arrival, and during this time they raised nothing whatsoever. The author was told that during the following year they would pay more attention to neighboring ranchers and try to farm just like the ranchers; but the ranches are devoted largely to the raising of cattle which graze on brush, whereas the Sinarquistas are making no attempt to develop livestock.

When it became apparent that the seeds which they had planted were not going to sprout, they proceeded to dig, with pick and shovel, a canal about one kilometer in length from a dry arroyo to their farmlands. Although the arroyo looked to the author as if there had been

no water in it for ten years, they fully expected it would rain and that they could then irrigate their lands by means of this canal. They were patiently waiting for the water. In the meantime, the well dug by the general had begun to cave in, and the water developed a bad taste which was attributed to the mesquite poles with which it was lined at the bottom. It was decided to dig a new well and abandon the old one. The new well was about 55 or 60 feet deep but not yet finished. They had encountered water and installed a 20-horsepower gasoline engine and a 4-inch pump. With what water they had pumped out, they had been able to irrigate a small plot, possibly a hectare, and this had been planted to corn. They hoped to get enough water that spring to irrigate 25 hectares.

The fourteen months of the colony's existence had been a critical period. The desert heat, the dust, the isolation, and perhaps the apparent futility of their efforts had brought discouragement and ill health to many. One by one the families began to leave until there were but *eight families* remaining.

At the time of the author's visit, the colony was able to boast of a church and five small adobe houses. The houses were divided so that each could accommodate two families if necessary. Each family was provided with only one room and a lean-to, usually made of brush, for a kitchen. All had dirt floors and roofs made of a species of bamboo covered with straw and dirt. There was no furniture except for boxes and homemade articles. Beds consisted of straw mats placed on wooden platforms. There was not a radio or stove in the colony. Everyone cooked over open fires.

The colony was financed entirely by the national organization. It was then receiving 250 pesos per week. Most of this was distributed in the way of credit at the local store to the various families. A single person was allowed 5 pesos per week; a family, slightly less than 5 pesos per individual, since it was assumed that with more than one individual in the family the expenses would not be proportional to those of the individual living alone. Nobody received cash but received, instead, coupons which were accepted for merchandise at the local store.

The project at that time was carried on in communal fashion. This was very much of a surprise to the author, since one of the main criticisms made by the Sinarquistas against the Mexican agrarian program is directed at the collective ejido. The Sinarquista paper has repeatedly clamored for the breaking-up of the collective ejidos and for the distribution of individual titles to the land; but at Villa Kino nobody

had any property he could call his own. The director of the project decided what was to be done and allotted the various tasks to individuals, although it was said that others were free to make suggestions. The houses were constructed by the group as a whole, and no house belonged to any particular family. All received the same proportionate allowance from the contributions of the national organization, and all worked on the project at whatever tasks were assigned to them. It was said that the eventual plan was to establish each family on a tract of about twenty hectares of land to be irrigated by means of a well and a pump. Until the water problem could be solved, however, they deemed it advisable to work as one unit.

The prospects of success for the colony appeared to be very slim and dependent largely on two factors. The first factor was the length of time the national organization would continue to finance the project. Naturally, a few of the colonists would continue to remain there as long as they were paid for doing so. Some of them probably were earning about as much there as they did in Guanajuato, even if it was barely a subsistence living. The Sinarquista publications had never carried a frank appraisal of the work of the project. They continued to solicit funds from the membership for the colonization project, and the contributors probably believed sincerely that they were helping to promote a noble cause. If the national organization should cease to support the project, it probably would be abandoned almost immediately.

The second factor which would influence the success of the project is the amount of water that they could get from their wells. The peasants of the colony appeared to be sincere, hardworking, humble folk with lofty ideals; nevertheless, the transformation of a desert into a garden requires more than lofty idealism, and one wonders why the leaders did not seek expert advice before undertaking such a venture.

2. *María Auxiliadora*.—From what the author has been able to learn, the colony in Baja California, known as *María Auxiliadora*, has been no more successful than *Villa Kino*.⁴⁸ It was begun as a much more grandiose scheme. It was first announced in 1941 that one hundred thousand Sinarquistas would colonize Baja California.⁴⁹ By the time they were ready to leave on December 12, 1941, however, the

48. The following information concerning *María Auxiliadora* is taken largely from Mario Gill, who made a personal trip to the colony in February, 1944 (see Gill, *op. cit.*, and the magazine *Mañana*, Nos. 30 and 31, March 25 and April 1, 1944, respectively).

49. Gill, *op. cit.*, p. 133.

number of prospective colonists had been reduced to 86 families, a total of 450 persons who actually made the trip. These families were led by none other than Salvador Abascal, another of the founders of sinarchism and former supreme chief, who resigned this latter position in order to direct personally the colonization project. It should be mentioned that Abascal was trained for the priesthood and that he had had no experience whatsoever with agriculture or colonization.

María Auxiliadora is situated on a desert area of Baja California, about 217 miles northwest of the city of La Paz and a few miles inland from Magdalena Bay on the coast of the Pacific Ocean. The original site chosen was at Santo Domingo, about 5 miles farther north; but, after staying there for a few months, they abandoned Santo Domingo and moved to the present location. Many of the colonists soon became sick and discouraged. Some refused to endure the hardships any longer, especially since they could see no prospects of success, and returned to Guanajuato or Michoacán. During the first two years at least fifteen children and six adults died. When Gill visited the colony in February, 1944, there were only 245 persons left of the 450 original

cultural colony, it would go down in the annals of Mexican history as a glorious event because of the sufferings and hardships endured by the colonists.

We have no concrete data concerning the colony in Tamaulipas, but informal reports reaching the author lead us to assume that it is probably no more successful than the two described.

Through the personal visit to Villa Kino and through conversations with persons who had visited the other two colonies, the author received the impression that the colonization scheme was devised more for the publicity and the prestige which the success of the projects might give to the Sinarquista movement than for the purpose of providing land for the members. At Villa Kino the author expressed some misgivings concerning the future outlook for the success of the colony. "Why don't you abandon the project now, before spending any more money on it, and move farther south where water is not such a serious problem?" The answer was that if the project were abandoned it would be a very serious blow to sinarchism. Enemies of the movement would use this fact as evidence of the inability of the Sinarquistas to accomplish projects of a practical nature. They would say, "All that the Sinarquistas do is talk." On the other hand, if the colony were eventually established on a firm basis, it would result in great prestige for the movement in bringing some of Mexico's unused and apparently worthless land into agricultural production.

THE SINARQUISTAS WISH TO PRESERVE THE SPANISH TRADITIONS

The Sinarquistas want to keep uncontaminated by outside influences what they consider to be Mexico's traditions, customs, and beliefs. They regard Mexico's heritage as essentially Spanish. Although the greater proportion of the members are probably indigenous peoples having a much greater proportion of Indian than of Spanish blood, the Sinarquistas never mention the preservation of Indian culture and traditions. They severely criticize the ejido system, which is patterned after the pre-Conquest forms of land tenure.

CONTROL OF GOVERNMENT

There appears to be ample evidence from their official publications and speeches that the Sinarquistas expected eventually to take over the reins of government in Mexico and to make of it a Sinarquista state along authoritarian lines, with the church playing an important role. This is clearly indicated in a pamphlet published by the organization in 1941, entitled *México—1960*, which gave a rather detailed descrip-

tion of Mexico under the anticipated Sinarquista regime. One gathers from their writings that they hoped to gain in membership and strength until they could take over merely by virtue of their superiority in numbers and strength in relation to other groups. They did not constitute a political party; they did not vote in elections;⁵⁰ nor did they carry weapons either in their demonstrations or in private. One gets the impression, nevertheless, that all this was a matter of expediency until such time as they felt they could definitely triumph over their enemies. There are many references in their literature which indicate that they might resort to violence if this ultimately became necessary in order to achieve their objectives. Note the following statements, for example:

No, let us not give any importance to politics from which we will derive only misrepresentations and slander.

Let us all give importance only to the brave task of remaining firmly together in our columns in order to jump into the combat of liberation at the first order of the chief.

Let all of the people know it, let those who believe in political parties know it. We shall advance on them to fuse them into our unity or to defeat them. . . .⁵¹

The Sinarquista does not pay attention to threats, insults or abuses. He is firm and will not fall back. He is the spear and the battering ram which will open breaches in enemy walls to liberate his Fatherland from slavery and poverty. He will overwhelm the tyrants, the leaders and the legislators who oppress, enslave, humiliate and hold back the Mexicans. The Sinarquista is the authentic Mexican who will soon achieve his greatness, his freedom, his justice, his happiness.⁵²

In *México—1960*, contrast is drawn between conditions anticipated in the Sinarquista state of 1960 and those of the revolutionary period during the 1940's. The transition from one to the other is alleged to have resulted from the boldness of the Sinarquista chiefs, the "bravery of our soldiers," and the "torrents of blood shed in our epic struggle."⁵³

That the Sinarquistas would not have hesitated to take up arms whenever the proper moment arrived is suggested by the articles appearing in *El Sinarquista*, No. 278, June 22, 1944, which resulted in the suppression of the newspaper. The title of one of the articles was

50. As noted earlier, they may have changed their attitudes in this respect, since a Sinarquista was elected to the National Chamber of Deputies in July, 1946.

51. *El Sinarquista*, No. 77, August 8, 1940.

52. *Sinarquismo*, No. 8, April, 1939.

53. *Unión Nacional Sinarquista, México—1960* (Mexico City, 1941), p. 11.

"Paro General" ("general strike") and appeared in a bold headline. The article warned of a general strike by the Communists, probably to take effect on July 5, 1944, at which time the Communists would probably try to take over the government of Mexico. The article then makes the following observations:

Should the general strike take place, the Government of General Manuel Avila Camacho will go down in history as the betrayer of the will of the Mexican people, as the deliverer of the Mexican Fatherland to the most brutal of imperialisms and the most horrible of dictatorships.

The blood that will be shed, and it will run like rivers if the communists carry out their plans, will be the dark epilogue of all the treasons devised by the revolution and its men during the last few decades of our history.

The blood will run; but it will not be precisely and exclusively ours, but mainly—we trust to God—that of the communists and of those responsible for giving them that opportunity.

MEXICO, ATTENTION!

We shout our most anguished word of alarm to all sectors of the people of Mexico so that they may prepare to meet one of the most chaotic, dangerous and decisive stages of our history.

We find ourselves on the eve of the day when our destiny will be at a crucial point; toward total communism or toward the Christian Social Order. Communism or sinarchism.

Every man and woman of Mexico knows his duty in view of such grave circumstances, and we urge him to be on guard, with the arms ready to meet any emergency, ready at any event to come out victorious.

Invoking the sacred name of God, and turning once more our eyes full of faith towards the *Virgen Morena*, the Captain of all our sacred wars, let us make ready to defeat communism and all the traitors who endanger our existence as a Catholic nation.

México—1960 depicts the Sinarquista state as already established and working with streamlined efficiency. It describes far-reaching improvements in the standards and levels of living and claims to have waged a successful campaign against "hunger, rags and hovels" (p. 11). It claims to have made vast improvements in housing, sanitation, cleanliness, and diet. The agrarian problem is said to have been solved by bringing into cultivation large areas of previously unused land by means of vast irrigation projects and the extension of communication facilities. Every family in the entire country has been able to achieve the Sinarquista goal of obtaining for itself a slice of Mexican soil. In this Sinarquista utopia, illiteracy has been reduced to 4 per cent; agricultural production has been greatly increased through programs of peasant education; national resources and industries have been de-

duction is also under the strict supervision and censorship of the Sinarquista regime and is used as an effective agency for building morale and patriotism. An efficient and powerful army has been organized and equipped for the purpose of protecting and strengthening the "New Christian Order" and for keeping the peace. All workers are organized into a national Sinarquista labor union.

From the foregoing, it is obvious that the Sinarquistas aspired to an authoritarian regime wherein all phases of life would be strictly regulated and controlled by the chiefs. Such a system would, of course, lend itself readily to the whims of the particular group in power. It could facilitate the widespread suppression of individual liberties or the delivery of the country into the hands of foreign interests and would be susceptible to any of the other potentialities of a real dictatorship.

It seems improbable that the believers in the ideals of the Mexican Revolution would ever submit peacefully to the taking-over of the reins of government by the Sinarquistas. As Edward Skillin, Jr., said in 1944:

If Sinarquistas succeed in growing considerably more in numbers, there is real danger of a bloody civil war. If in such a conflict they are defeated, the condition of their adherents will be even worse than it is at present. Were they to win, we should once again have a dictatorial state adorned with Catholic symbols and forcibly repressing all opposition—until the whole kettle boils over once more, to the terrible detriment of the Church.⁵⁵

In 1944 dissension arose among some of the leaders of sinarchism, with the result that at least five prominent leaders were weeded out of the organization. These included José Trueba Olívares and Salvador Abascal, two of the original founders of the movement and the founders of the two Sinarquista colonies. In a statement to the press at the time of his withdrawal from the organization, Abascal said, among other things:

I have become convinced, unfortunately, that lawyer Torres has corrupted the organization, since many of its chiefs are nothing but unconditional employees, without personality or individuality, content merely because under the policy of the lawyer they run no risk. Those below continue to die and to fall in jail. Those above are in no danger at all. In view of this I have entirely desisted from disputing Torres Bueno his command; I would be able to count on only a few chiefs. . . .

55. Edward Skillin, Jr., "A Note on Mexican Sinarquism," *Commonweal*, Vol. XL, No. 8 (June 9, 1944).

The people should withdraw from this sinarchism which is only another deceit. I must ask for forgiveness of the Sinarquistas, and I do so now, for the very grave mistake which I made when I appointed lawyer Torres national chief.⁵⁶

Apparently these former founders and chiefs of the movement are now beginning to realize that there are a few inconveniences in belonging to an organization where "the chiefs issue all of the orders, and the soldiers merely obey."

On May 20, 1945, the Sinarquistas were permitted to hold a mass meeting in the city of León, Guanajuato. The occasion was the annual celebration of the birth of sinarchism. Officials of the organization claim that 50,000 members attended the meeting.⁵⁷ It is reported that at this meeting lawyer Manuel Torres Bueno delivered the leadership of the organization into the hands of Gildardo González Sánchez, who from that date became national chief of the movement.

The prestige of sinarchism has suffered severe blows since 1944, and it is quite possible that sinarchism may gradually fade away from the Mexican scene; but other movements may arise to take its place just as it, in a sense, may be regarded as a sequel to the former *Crisistero* rebellion. As long as there is widespread poverty among the masses of the rural population; as long as the politicians forget their promises after having been elected to public office; and as long as there is antagonism between church and state, rural Mexico will be a favorable seed bed for the germination of such movements as sinarchism.

Early in January, 1946, the Sinarquistas received a great deal of sympathy over what has since been referred to as the "León massacre." An election had been held for the selection of a mayor for the city of León, Guanajuato, stronghold of the Sinarquistas. From all appearances a Sinarquista candidate had won out by a large majority over a candidate of the government-sponsored party Partido de la Revolución Mexicana (P.R.M.). Despite this fact, the governor of the state of Guanajuato installed the candidate of the P.R.M. and sent troops to the city to maintain order. After attempting to hold a protest meeting against the installation of the losing candidate, which was broken up by the police, a crowd gathered at the city hall and the troops opened fire, killing about forty civilians, most of whom were Sinarquistas. President Avila Camacho ordered an official investigation, as a result

56. *Novedades* (Mexico City), May 17, 1944.

57. *Excelsior*, May 21, 1945.

of which he deposed the P.R.M. candidate, installed the Sinarquista candidate as mayor, forced the resignation of the governor of Guajuato, and shifted the army officers involved to inactive status.

In the presidential elections of July, 1946, the Sinarquistas succeeded in electing one of their members as a representative to the national Congress. They appear to be reasonably well pleased with the national program outlined by President Miguel Alemán. A statement published recently in their magazine, *Orden*, went so far as to say: "Alemán incorporates in his Government the social and political ideals of sinarchism. Our doctrine is prevailing over the errors of the past. . . . Sinarchism will co-operate enthusiastically and loyally with the new regime in its national constructive work."⁵⁸ It would appear that they think they behold in the new government a swing away from former leftist policies.

58. Quoted in *Hispano americano*, December 13, 1946, p. 7.

CHAPTER XXI

Government

MEXICO is a federal republic, divided into twenty-eight states, three territories, and a federal district. Each state has the right to manage its own local affairs, but all are bound together into a federal system. The supreme power of the federation is divided for its exercise into three branches—the legislative, the executive, and the judicial. National legislative power is vested in a general congress consisting of a Chamber of Deputies and a Senate.

The Chamber of Deputies is composed of representatives of the nation, each of whom is elected by the citizens for a three-year term. From each state one deputy is elected for every 150,000 inhabitants, or fraction thereof exceeding 75,000, taking into account the most recent general census of the Federal District and of each state and territory. The provision is made, however, that no state shall have fewer than two deputies, and each territory at least one deputy, regardless of the number of inhabitants. At the present time the chamber includes a total of 147 deputies.

The Senate is composed of two senators from each state and two from the Federal District, all of whom must be elected every six years. Senators and deputies to Congress cannot be re-elected to succeed themselves. Each house passes judgment on the election of its members and decides all questions arising therefrom. Its decision is final.

Each state has its own constitution, government, taxes, and laws; and it has its governor and legislature, consisting of a chamber of deputies, and judicial officers popularly elected under rules similar to those of the federal government. The president of the Republic appoints the governors of each of the three territories, as well as the chief of the Federal District.

Woman suffrage in national elections does not exist in Mexico. The

right to vote is vested only in male citizens who are at least eighteen years of age if married, or twenty-one years of age if unmarried. Several attempts have been made to introduce woman suffrage, but, as yet, these have been unsuccessful. The usual arguments against woman suffrage are that woman's place is in the home; that she has not developed the civic consciousness or the mental preparation to qualify her for participation in civic affairs; and that she has neither the economic independence nor the responsibility to justify granting her the right to exercise the vote. Some of the more left-wing leaders oppose woman suffrage on the grounds that the women of Mexico are traditionally conservative, uneducated, and incredibly superstitious.¹ It is feared by these leaders that the church might unduly influence their thinking concerning political questions.

Since 1928 there have been a few municipalities in Mexico wherein local constitutions have permitted women to be candidates for municipal offices. Women have held office, for example, in Tapachula, Chiapas; in Mérida, Yucatán; and in Chilpancingo and Acapulco, Guerrero. On December 6, 1946, President Alemán sent a message to Congress urging that Article 115 of the Constitution be amended to give women the right to vote in municipal elections and to hold office in the municipalities. He reasoned that participation in local affairs would give women valuable experience that might serve to qualify them later to participate in state and federal affairs. This article was officially amended on February 12, 1947, to include the following statement: "Women shall take part in municipal elections on equal terms with men, with the right to vote and to hold office." In April, 1947, President Alemán also appointed a woman (María Lavalle Urbina) to the Superior Tribunal of the Federal District.

THE MUNICIPALITY

The Constitution of 1917 provided for the organization of local representative government within each state in the form of the *municipio libre* or free municipality. Although the municipality had existed previously, local representative government hardly existed in Mexico prior to 1910. During the long Díaz regime the various states of the Republic were divided into districts, and each district was presided over by a *jefe político* ("political chief") appointed by the governor, usually with the approval of Porfirio Díaz. This *jefe político*

1. Nathaniel and Sylvia Weyl, *The Reconquest of Mexico—the Years of Lázaro Cárdenas* (New York, 1939), p. 354.

was virtually a miniature dictator over the inhabitants of his district. He had at his command the *rurales*, a mounted and well-armed rural police force, with which to enforce the various orders, decrees, and unwritten laws of the time and place. Evidence is abundant to the effect that these *rurales* often acted arbitrarily in accordance with the whims of the *jefe político*, and punishment was often meted out to individuals and groups with little concern about attempting to demonstrate innocence or guilt. *Ley fuga*, the act of shooting a prisoner who was allegedly trying to escape, became a practice so common that it was used as a method of getting rid of political enemies and even of obstreperous peasants. Parkes claims that there were more than ten thousand cases of *ley fuga* during the Díaz regime.² Incidents have been recorded wherein the *rurales* rounded up supposedly obstreperous Indians and sold them to plantation owners in southern Mexico. Many of them, working from dawn until sunset, succumbed to the tropical diseases to which they had developed no immunity.³

The districts were fewer in number and larger in size than the present municipalities, and they are still used in most states as bases for grouping municipalities into tax-collecting districts; in some states they serve as judicial districts. Other than for these two minor uses, however, the districts now have no legal functions.

The legal basis for municipal government is found in Article 115 of the Constitution:

The States shall adopt for their internal government the popular, representative, republican form of government; they shall have as the basis of their territorial division and political and administrative organization the Free Municipality, in accordance with the following provisions:

Each Municipality shall be administered by a municipal council chosen by direct vote of the people, and no authority shall intervene between the Municipality and the State Government.

The Mayors, councillors and officials of the municipal councils, elected by direct vote of the people, may not be re-elected for the period immediately following. Persons who act as such by indirect election or appointment or nomination by any of the authorities, whatever be the title given them, may not be elected for the term immediately following. . . .

The Municipalities shall freely administer their own revenues, which shall be derived from the taxes fixed by the State Legislatures and which at all times shall be sufficient to meet their needs.

2. Henry Bamford Parkes, *A History of Mexico* (Boston 1901) p. 294.

3. *Ibid.*, p. 296.

TABLE 89

MUNICIPALITIES OF MEXICO, CLASSIFIED ACCORDING TO LAND AREA AND
NUMBER OF INHABITANTS, BY REGIONS AND STATES*

Region and State	Total Land Area (Square Miles)	No. of Municipalities†	Average No. of Square Miles per Municipality	Total Population	Average No. of Inhabitants per Municipality
North Pacific.....	159,205.8	112	1,421.5	1,204,073	10,751
Baja California N....	27,648.0	3	9,216.0	78,907	26,302
Baja California S....	27,971.5	7	3,995.9	51,471	7,353
Nayarit.....	10,544.4	18	585.8	216,098	12,039
Sinaloa.....	22,576.4	16	1,411.0	492,821	30,801
Sonora.....	70,465.5	68	1,036.3	364,176	5,356
North.....	308,922.0	340	908.6	3,902,685	11,478
Coahuila.....	58,052.5	38	1,527.7	550,717	14,493
Chihuahua.....	94,806.2	64	1,481.3	623,944	9,749
Durango.....	47,678.7	37	1,288.6	483,820	13,076
Nuevo León.....	25,129.8	52	483.3	541,147	10,407
San Luis Potosí.....	24,411.0	58	420.9	678,779	11,703
Tamaulipas.....	30,726.4	30	787.9	458,832	11,765
Zacatecas.....	28,117.4	52	540.7	505,437	10,874
Central.....	106,558.2	781	136.4	9,430,009	12,074
Aguascalientes.....	2,498.2	7	356.9	161,693	23,090
Distrito Federal.....	572.4	13	44.0	1,757,530	135,195
Guanajuato.....	11,801.9	44	268.2	1,046,490	23,784
Hidalgo.....	8,055.8	80	100.7	771,818	9,648
Jalisco.....	31,143.6	119	261.7	1,418,310	11,919
México.....	8,265.8	119	69.5	1,146,034	9,631
Michoacán.....	23,195.9	102	227.4	1,182,003	11,588
Morelos.....	1,916.1	32	59.9	182,711	5,710
Puebla.....	13,122.8	215	61.0	1,294,620	6,021
Querétaro.....	4,431.3	11	402.8	244,737	22,249
Tlaxcala.....	1,554.4	39	39.9	224,063	5,745
Gulf.....	91,689.0	331	277.0	2,432,390	7,349
Campeche.....	19,667.5	8	2,458.4	90,460	11,308
Quintana Roo.....	19,625.4	4	4,906.4	18,752	4,688
Tabasco.....	9,780.1	17	575.3	285,630	16,802
Veracruz.....	27,751.9	197	140.9	1,619,338	8,220
Yucatán.....	14,864.1	105	141.6	418,210	3,983
South Pacific.....	91,979.6	761	120.9	2,684,395	3,527
Colima.....	2,009.1	9	223.2	78,806	8,756
Chiapas.....	28,724.2	109	263.5	679,885	6,237
Guerrero.....	24,880.8	71	350.4	732,910	10,323
Oaxaca.....	36,365.5	572	63.6	1,192,794	2,085
Total.....	758,354.6‡	2,325	326.2	19,653,552	8,453

* Data compiled from *Sexto censo de población* (1940) (Dirección General de Estadística).† Minor civil divisions in the Distrito Federal, Baja California Norte, Baja California Sur, and Quintana Roo are *delegaciones*. For convenience, all are listed here and in succeeding tables as municipalities.

‡ This total does not include 1,821.1 square miles representing uninhabited islands.

The Municipalities shall be regarded as enjoying corporate existence for all legal purposes.⁴

Within the limits of these federal specifications, each state is free to enact legislation of its own for the government and control of the municipalities within its borders, and each state has a set of its own municipal laws. This naturally makes for variation among states. The municipality may also initiate legislation adapted to its own particular needs, but usually this must be approved by the appropriate state legislature and, as a rule, consists only of adaptations of a very minor character. In general, there is a high degree of uniformity in municipal law and procedure within the state, although some disparity exists among states.

SIZE OF MUNICIPALITIES

There is no uniformity as to the size of the municipalities either as to land area or as to number of inhabitants. There is a total of 2,325 municipalities,⁵ with an average land area of 326.2 square miles and an average population of 8,453 inhabitants (Table 89). In general, the larger municipalities are located in the northern regions, while the smaller ones are found in the south Pacific and central regions. The smallest average area of municipalities by states is found in the state of Tlaxcala, where it is only 39.9 square miles; the largest is in Baja California Norte with 9,216.0 square miles.

The average number of inhabitants per municipality varies by regions from only 3,527 in the south Pacific to 12,074 in the central region. The small average size in the south Pacific is due largely to the great number of very small municipalities in the state of Oaxaca, where, with 572 municipalities, many more than in any other state, the average size is only 2,085 inhabitants per municipality. The large average number of people in the central region is influenced greatly by the states which have at least one large city or several fairly large ones. The Federal District (Distrito Federal), for example, contains Mexico City, which accounts for the fact that the average size of the municipalities in the district is listed at 135,195 inhabitants. From the standpoint of population, the consistently large municipalities tend to

4. *Political Constitution of the United States of Mexico*, translated by Asociación de Empresas Industriales y Comerciales, Art. 115.

5. Actually the local divisions in the three territories (Baja California Norte, Baja California Sur, and Quintana Roo) and in the Federal District are known as *delegaciones* instead of municipalities. For convenience all will be referred to as municipalities.

TABLE 90

MUNICIPALITIES OF MEXICO, CLASSIFIED ACCORDING TO NUMBER OF INHABITANTS, BY STATES AND REGIONS*

REGION AND STATE	TOTAL No. OF MUNICIPALITIES		TOTAL No. OF INHABITANTS					
			Under 1,000	1,000 to 2,499	2,500 to 4,999	5,000 to 9,999	10,000 to 24,999	25,000 and Over
	No.	Per Cent	Per Cent of All Municipi- palities	Per Cent of All Municipi- palities	Per Cent of All Municipi- palities	Per Cent of All Municipi- palities	Per Cent of All Municipi- palities	Per Cent of All Municipi- palities
North Pacific.....	112	100	5.4	23 2	17.9	22 3	17.8	13.4
Baja California N. .	3	100	...	...	...	...	66.7	33 3
Baja California S....	7	100	...	...	28.6	42.8	28 6	...
Nayarit.....	18	100	...	...	11.1	50 0	27.8	11 1
Sinaloa... ..	16	100	...	...	...	12.5	31.3	56 2
Sonora . . .	68	100	8 8	38 3	23 5	16.2	8 8	4 4
North	340	100	1.5	7.6	26.8	30.0	24 7	9 4
Coahuila . . .	38	100	2 6	7.9	29 0	23 7	21.0	15 8
Chihuahua... ..	64	100	...	6.3	34.4	31.2	23.4	4.7
Durango . . .	37	100	...	5.4	13 5	32.4	37 9	10 8
Nuevo León . .	52	100	5 8	19.2	32.7	21.2	13 4	7.7
San Luis Potosí . .	58	100	...	25.0	50.0	25 0	...	...
Tamaulipas . .	39	100	2.6	10.2	30 8	28 2	15.4	12 8
Zacatecas . . .	52	100	...	3 9	30 8	26 9	26.9	11.5
Central	781	100	1.5	12.3	23.1	30.7	25.7	6.7
Aguascalientes....	7	100	...	...	14 3	28.6	42.8	14.3
Distrito Federal .	13	100	...	...	...	7 7	38.5	53 8
Guanajuato . . .	44	100	...	2.3	11.4	13.6	31.8	40 9
Hidalgo... ..	80	100	...	2 5	17.5	46 3	31 2	2.5
Jalisco	119	100	...	2 5	25 2	32 8	36.1	3 4
México	119	100	0.8	15.1	21 0	24.4	34.5	4.2
Michoacán. . . .	102	100	...	2.0	10.8	46.1	34.3	6.8
Morcos	32	100	...	21 9	34.4	37.5	3.1	3.1
Puebla	215	100	5.1	27.0	30 7	24.6	10 7	1.9
Querétaro . . .	11	100	...	...	...	27 3	45 4	27.3
Tlaxcala	39	100	...	12 8	43.6	28 2	15 4	...
Gulf.	331	100	6.6	26.3	23.9	23.6	14.5	5 1
Campeche	8	100	...	...	25 0	37.5	25 0	12.5
Quintana Roo . .	4	100	...	25 0	50 0	25 0	...	...
Tabasco	17	100	...	...	...	35.3	47.1	17.6
Veracruz	197	100	3.0	17.3	27.9	28.4	17.3	6 1
Yucatán	105	100	15.2	49 5	19 1	11 4	3 8	1 0
South Pacific . .	761	100	22 7	38.8	18.3	12.5	6.8	0 9
Colima	9	100	...	11.1	33.3	33.4	11.1	11.1
Chiapas	109	100	3 7	15.6	33 9	28.5	17.4	0 9
Guerrero... ..	71	100	...	7.1	14 1	36.6	36.6	5.6
Oaxaca	572	100	29.6	47.5	15.6	6 1	1 0	0.2
Total.....	2,325	100	9.4	22 8	21 9	23 2	17.4	5 3

* Data from *Sexto censo de población (1910)* (Dirección General de Estadística).

be found in the north, where the range in average size is from 9,749 inhabitants in the state of Chihuahua to 14,493 in the state of Coahuila.⁶

For the country as a whole, 9.4 per cent of all municipalities have less than 1,000 inhabitants (Table 90). This involves a total of 218 municipalities, most of which are located in the state of Oaxaca. In this state 29.6 per cent of all municipalities have less than 1,000 inhabitants. Oaxaca is the prize example of what Gilberto Loyo calls "municipal pulverization."⁷ It contains about one-fourth (24.6 per cent) of all the municipalities in the Republic and 77.5 per cent of all the municipalities that have less than 1,000 inhabitants. On the other hand, there are twenty-two states (two-thirds of the total number) which have no municipalities containing as few as 1,000 inhabitants. There are nine states which have no municipalities containing fewer than 2,500 inhabitants.

Gilberto Loyo attributes many of the social and economic problems of the rural districts to the small size of the municipalities. He argues that there is a direct positive correlation between the number of inhabitants of the municipality and the income which the municipality is able to collect in revenue for the purpose of financing social institutions. He claims that municipalities in Mexico with less than 5,000 inhabitants (54.1 per cent of all municipalities) are demographically anemic, in that they have less than the minimum number of inhabitants required to provide a sufficient tax base for furnishing revenue to support modern social and economic institutions. He expresses the opinion that municipalities with 5,000–20,000 inhabitants are able to maintain adequate institutions only with great difficulty. He concludes that only those with more than 20,000 inhabitants have sufficient numbers to enable them to maintain adequate institutions, and, of this latter group, only those having more than 50,000 inhabitants are actually supporting more or less adequate institutions.⁸

The author has not attempted to verify Loyo's hypothesis and hence is unable to say to what extent it is valid. Certainly, there is a minimum number of inhabitants which would be necessary to provide sufficient revenue to support adequate institutions; but just how large this minimum should be would depend upon numerous factors,

6. The reader is referred to Fig. 8 (p. 31) for a comparison of the population densities according to municipalities.

7. Gilberto Loyo, *La Política demográfica de México* (Mexico City, 1935), pp. 291 ff.

8. *Ibid.*, pp. 291–98.

including such elements as the type of institutions deemed adequate, the available resources of the particular community in question, the methods of taxation, and the efficiency with which the funds collected were used in establishing and maintaining the institutions. Other factors which influence the welfare of the small communities will be discussed later in this chapter.

Most of Mexico's municipalities are very rural indeed. Of the total number, 73.3 per cent contain no urban population whatsoever (Table 91). This means that in all these municipalities there is not a single center which has as many as 2,500 inhabitants. These strictly rural municipalities include 37.7 per cent of Mexico's total population. By regions the greatest proportion of these rural municipalities is found in the south Pacific, in which 89.1 per cent of all municipalities and 66.1 per cent of the total population are included. The smallest percentage of strictly rural municipalities is found in the central region, where 62.5 per cent of all municipalities contain no urban centers and include 30.3 per cent of the total population.

MUNICIPAL OFFICERS

In all states the municipal government is under the local administration of a municipal council, the members of which are supposed to be elected by direct vote of the residents of the municipality. The members of this council usually hold office for a period of two years. The number of councilmen varies with the size of the municipality, though seldom is it less than five. The council is presided over by a *presidente municipal* ("municipal president") who is its executive officer and who usually has wide powers of independent action. In some states the *presidente* is elected directly to the office by vote of the people, while in others he is chosen by the members of the council from among their own membership at its first meeting. The *presidente* receives a nominal salary for his services, and in most municipalities he is the only member of the council who does; others usually serve without compensation. In most states service on the municipal council is considered an honorable duty and may not be refused except for specified reasons. To be eligible for election to the council, one must be a resident of the municipality, must be of age, and must know how to read and write. This last requirement of itself precludes a large proportion of the population, since only about half the population of Mexico can read or write.⁹

9. See chap. xvii.

TABLE 91

MUNICIPALITIES OF MEXICO IN WHICH THERE WAS NO URBAN
POPULATION IN 1940,* BY REGIONS AND STATES†

REGION AND STATE	NO. OF MUNICIPALITIES WITH NO URBAN POPULATION		POPULATION OF MUNICIPALITIES HAVING NO URBAN POPULATION	
	No.	Per Cent of All Municipi- palities	Population	Per Cent of Total Popu- lation
North Pacific	73	65.2	370,164	30.7
Baja California N.	4	57.1	18,235	35.4
Baja California S.	9	50.0	61,629	28.4
Nayarit.	8	50.0	154,405	31.3
Sinaloa	52	76.5	135,895	37.3
Sonora				
North...	225	66.2	1,377,501	35.3
Coahuila	18	47.4	77,157	14.0
Chihuahua	47	73.4	295,987	47.4
Durango..	21	56.8	162,166	33.5
Nuevo León	40	76.9	196,253	36.3
San Luis Potosí	39	67.2	302,841	44.6
Tamaulipas	30	76.9	159,868	34.8
Zacatecas	30	57.7	183,229	32.4
Central..	488	62.5	2,855,211	30.3
Aguascalientes	4	57.1	27,349	16.9
Distrito Federal	1	7.7	6,025	0.3
Guajuato	13	29.6	106,043	10.1
Hidalgo...	61	76.3	478,826	62.0
Jalisco.	59	49.6	333,910	23.5
México	76	63.9	562,890	49.1
Michoacán	47	46.1	331,777	28.1
Morelos	22	68.8	81,781	44.8
Puebla.	172	80.0	688,999	53.2
Querétaro	8	72.7	127,694	52.2
Texcoco	25	64.1	109,917	49.1
Gulf...	241	72.8	1,023,369	42.1
Campeche	4	50.0	22,957	25.4
Quintana Roo	3	75.0	9,552	50.9
Tabasco...	10	58.8	104,076	36.4
Veracruz...	142	72.1	739,824	45.7
Yucatán..	82	79.0	146,990	35.1
South Pacific	678	89.1	1,774,493	66.1
Colima	5	55.6	29,068	25.5
Chiapas	92	84.4	455,177	67.1
Guerrero.	48	67.6	277,855	50.1
Oaxaca	533	93.2	530,763	78.0
Total	1,705	73.3	7,450,648	37.7

* These municipalities contained no population centers having as many as 2,500 inhabitants.

† Data from *Sexto censo de Población (1940)* (Dirección General de Estadística).

The municipal council serves as a legislative body which may enact legislation for its respective municipality within the limitations specified by federal and state laws. It also has responsibility for vigilance in seeing that the laws of the municipality are enforced. It has power to appoint and supervise any committees necessary to discharge its program. Members of the council may be held jointly responsible for any irregularities which occur in the administration of municipal funds; hence every member has the right to exercise vigilance over the expenditure of funds and to request complete and frequent explanations of such expenditures from the *presidente* and the treasurer. Decisions of the council are based on majority vote at official meetings.

The council selects and pays for whatever help it needs. This usually includes a municipal secretary, a treasurer, and such other workers as are deemed necessary.

The municipal headquarters (*cabecera de municipio*) are almost always located in the largest pueblo of the municipality. There usually is a municipal building situated in a convenient position fronting the plaza, wherein are held the meetings (usually weekly) of the council. Practically all the municipal business is transacted there. For convenient administration and control, a local officer is appointed by the municipal council for each village in the municipality except the *cabecera*. This local officer is referred to in some states as an *ayudante municipal* ("municipal assistant") and in others as a *comisario* ("deputy"). He is directly responsible to the council and goes out of office with it. He serves as a local deputy with police powers to enforce the rulings of the municipal council in his particular community or district. He also serves as a sort of liaison officer between his local village and the municipal council, reporting not only infringements of the laws but also the needs of his community.

The administration of justice in the local municipality is delegated to one or more municipal judges. In some municipalities these judges are appointed by the council, while in others they are elected with other municipal authorities. In the state of México, for example, they are elected by the voters and serve for a two-year period. They are referred to as *jueces conciliadores* ("conciliatory judges") and are considered as auxiliaries to the judges and tribunals of the state. In order to qualify for election to the position of conciliatory judge in the state of México, one must "be a Mexican citizen and a resident of

the municipality, in full exercise of his rights, and be more than 25 years of age."¹⁰ No legal training or experience is necessary.

In the more isolated communities, justice is more likely to conform to custom and to the traditions of the elders than to any legal code. This is not due to any wilful divergence from the requirements of the law but rather to lack of understanding of the law.

The character and functions of the municipal judges are described by Noriega Hope as they existed in the valley of Teotihuacán in the state of México. His characterization is probably applicable to many of the municipal judges in present-day Mexico, and for this reason some of his discussion is reproduced:

The chief judicial authority of the municipality is the conciliatory judge, who is a part of the municipal government. We have met many acting judges and many others who had served in that position in the past, and the intellectual similarity among them is so great that we do not hesitate to generalize the following concepts:

The conciliatory judge is always elected from among persons of some standing in the community and, generally, is a man of means and well known in the neighborhood. Although the position is not remunerated, there are always intrigues to obtain it, for besides being an almost honorary title, it satisfies the ambitions of the good villagers for power and influence.

Naturally these judges are absolutely ignorant of the legal precepts in force; but, on the other hand, they have a good dose of common sense and therefore solve admirably, in the Solomonic manner, the problems presented to them. The conciliatory judges are, therefore, characterized by legal ignorance, compensated by intelligence and an intuitive sense of fairness. As a result of this the procedure followed is very primitive and decisions are supported by good faith, rather than by written precepts. Furthermore, they are not aware, as a direct result of their judicial ignorance, of the effective limits of their jurisdiction, due to which they try cases which legally belong to judges of the first instance—which cases they solve amicably—and only when there is lack of agreement among the parties, are they referred to a superior judge.

Their lack of knowledge of their jurisdiction is also due—apart from their ignorance of the law—to the heterogeneous nature of the matters that come to their attention; and as they are, through custom, unable to establish differences in the procedure, intricate testamentary matters are given the same consideration as the theft of a few ears of corn. However, there is such judicial vision on the part of the judge, that almost always the parties are satisfied with the decisions, in spite of the quarrelsome nature of the Indian or the pompous eloquence of the richer men of the town. The judge does not always act justly; often his decisions are unfair either because in spite of his intuitive fairness he may make a mistake, or because his own interests may interfere. It must be remembered that the conciliatory judge is generally a person of standing and of means, and when the matter in question affects his own pocket book directly or indirectly, he becomes a

10. Estado de México, *Constitución política*, p. 39.

plague on those who have contracted with him and a source of impunity for his friends or relatives. There was once a judge who used to lend money with interest at the rate of twenty percent, and, naturally, during his term in office, his business was flourishing and secure, for the doors of the jail would open or close at his will.

On the other hand, there has been a judge willing to send his own father to jail and who almost did so with the municipal president; but these cases of disinterestedness and equanimity are rare.

The relative goodness of the system lies in one fact: the election of the judge. If he is a fair-minded person—as has usually been the case—the Indians are happy and they settle all their quarrels in a few minutes. If, on the other hand, this is not the case, justice is a myth and the most frightfully arbitrary acts menace the neighbors.¹¹

In addition to choosing their own municipal authorities, rural people who live on ejidos participate in the election of the officials of the ejido, and they participate as members of the general assembly to which ejido authorities are responsible. Ejidos are legal entities and may carry on activities for the general welfare of the community.¹² Rural people also have the right to participate in the election of representatives to both the state and the national legislatures and to participate in the election of other state and federal officials. For this purpose the state is divided into electoral districts, and rural people supposedly have a voice in choosing the representatives for the district in which they live. In fact, many of the state and federal deputies are chosen to represent purely rural districts where practically no urban population exists.

FEDERAL AND STATE AGENCIES

Rural people have contacts with representatives of state and federal agencies assigned to work in their districts. Representatives of the federal Department of Agriculture, for example, are distributed throughout the nation on a regional basis, and they frequently come in contact with rural people through the Division of Agrarian Organization, the Ejido Bank, and the national agricultural bank (Banco Nacional de Crédito Agrícola).

Mexico has no organization which is in any way comparable to the United States Agricultural Extension Service for carrying the results of research and improved agricultural techniques to the farmer and his family. A few years ago a federal service was available to farmers

11. Noriega Hope "Apuntes etnográficos," in Manuel Gamio, *La Población del Valle de Teotihuacán* (3 vols.; Mexico City, 1922), II, 269, 270.

12. See chap. ix for a discussion of the ejido organization.

through specialists known as "regional agronomists" (*agrónomos regionales*). There was only about one agronomist for each state, however, and his efforts seemed insignificant in comparison to the problems with which he was confronted. The service was abandoned in 1941. As indicated in previous chapters, certain aspects of extension work are carried on by the Ejido Bank and by the rural cultural missions.

Local agencies of the Secretariat of Public Health and Social Welfare are also distributed throughout the country and have co-operative programs with state and local agencies. The Secretariat of Public Education has jurisdiction over most of the rural schools and hence has representatives in almost every village in Mexico. Prior to December, 1946, there was a federal Department of Indian Affairs (*Departamento de Asuntos Indígenas*) which was charged with the task of looking after the welfare of the more needy Indian groups. Several vocational schools for Indian youths have been established by this department in various parts of the country (see chap. xvii). President Alemán recently transferred the functions of this department to other agencies.

THE PROBLEM OF DEMOCRACY

Although Mexico's government is organized along very democratic lines, there are a number of obstacles which interfere in greater or less degree with its functioning as intended by the lawmakers. Some of these are due to the social and cultural isolation of the inhabitants and others to human frailties in administering the legislation.

SOCIAL AND CULTURAL ISOLATION

The problem of achieving effective democracy on a national scale in any country is virtually impossible without efficient channels of communication so that the inhabitants in all parts of the country may become thoroughly acquainted with national issues and may take part in the formation of public opinion.

As has been indicated in previous chapters, the vast majority of Mexico's inhabitants still live in isolated rural communities cut off from the main stream of national life by mountain barriers, by lack of highways and railroads, and by the absence of newspapers, magazines, telephones, and radios. So great is the degree of isolation that in 1940 there were 1,237,018 persons in Mexico, five years of age and over, who could not even speak the official language of the country. These constituted 7.4 per cent of the total population. An additional

7.4 per cent of the inhabitants spoke Indian languages in addition to Spanish, but scholars have noted that this latter group probably speak very little Spanish. Thus in some areas the mere mechanics of communication by word of mouth have not been widely developed.

These communities constitute separate little societies unintegrated into the national life, and, when situations of more than local importance arise which require their participation, they often become victims of the whims of the more sophisticated *políticos*. Although in some instances the members of these isolated communities get along fairly well among themselves by following in the grooves of custom and tradition which their ancestors have worn, their lives are often subjected to the control of a local caeique ("political boss"). Their predicament is illustrated by a quotation from Dr. Sol Tax, a field anthropologist from the University of Chicago, who recently spent some time in the Chiapas highlands. He says:

.... I recently spent some months in Chiapas, the State of Mexico farthest from the center. The people of the interior of the state are chiefly Indians much like those I described for Guatemala; Mexico to almost all of them is a far away country as vague as Tibet is to us. The Indians vote for President and for members of the national and state assemblies, but they know nothing of what they vote for and it is a matter purely of routine. Local political bosses are able completely to control their votes—not their opinions, for the Indians do not form relevant opinions. Democracy has not come to the region. I may cite an illustrative incident.

Mexican and State law both forbid any kind of forced labor; yet locally it is understood that people can be forced to work on the roads, usually for pay. In the nearby metropolis lives a political boss who controls all of the communities of the neighborhood, including the one in which we were living; and while we were there the local Indian officials were continually asked by the boss to round up Indians to work on the roads. The officials did not like the task, but said they had no choice; the mayor told us that if he shouldn't succeed in recruiting the laborers he would go to jail. A crisis arose on the last day of our stay. A fiesta was in progress and the Indian officials had to participate ceremonially; not only that, but they enjoy fiestas and wanted to be there. At the town hall that Friday morning, they were perturbed because the boss had demanded their presence in the metropolis—to receive orders to recruit laborers for the following Monday. They didn't want to go, and knew besides that the task would be impossible. I suggested that they telephone the boss rather than go to the city afoot. After some convincing, for they had never used the telephone that had been installed for many years, the most progressive of the officials followed this counsel. The others gathered around to listen to the conversation (which was carried on in the Indian language). The news at the end was very bad—not because they were not excused from going to the city but because they found that they were expected to recruit the laborers without even the promise of payment. They were dismayed, for they

foresaw clearly the unpleasantness of the task of finding Indians who would leave their fields to work for nothing.

It happened that an hour later, the Governor of the State came through in his automobile, and he came out to the fiesta grounds—accompanied by the local officials and by me—for a short visit. I knew him well enough to inform him of the road situation, and he immediately called the Indian officials to him and told them very clearly that it was his order that they should not work for anybody without proper payment—and he emphasized the point by using the name of the boss involved. I thought that the Indians would be jubilant; but they were not, and I have little doubt but that this sort of thing had happened to them so frequently in the past that they knew that in the long run their situation would remain the same.¹³

Such isolated little societies as are found in the highlands of Chiapas and in many other parts of Mexico are not in a position to insist upon their rights, even if they knew what they were. They are left rather largely to the mercy of the whims of the *políticos*. When the latter happen to be kindhearted and considerate, little injustice is done; but too often the *políticos* are ambitious to promote their own political influence, and they use the Indians as a means of furthering these objectives. It is quite unusual for a sympathetic governor to appear on the scene at critical moments. These thousands of little communities, living in isolation, do not participate in national democracy. They hardly realize that they belong to Mexico. Their social horizons are limited largely by the distance which they can travel by horseback within a few days. The rest of Mexico is a strange legend to them.

LACK OF EDUCATION

Widespread illiteracy should also be mentioned as a factor in the failure of the municipalities to function democratically. In many areas the majority of the municipal population can neither read nor write and hence know nothing about the laws except what they hear from others. Being unaware of their rights and obligations, they become susceptible to exploitation by the shrewd and the aggressive.

If we assume that the efficient functioning of a democracy depends upon the ability of its people to comprehend their rights, privileges, and duties under the law and upon their ability to organize themselves in such a manner that they will be able to insist upon the enforcement of those rights and duties, then it is difficult to see how democracy can function effectively, especially in the more rural areas

13. Sol Tax, "The Problem of Democracy in Middle America," *American Sociological Review*, X, No. 2 (April, 1945), 195, 196.

of Mexico, until the educational and cultural level of the population is raised considerably. In this regard, the literacy campaign initiated by former President Avila Camacho¹⁴ and the school-building program of the Secretariat of Public Education are important undertakings which, if continued, may eventually have far-reaching results. At the same time, along with the teaching of reading and writing must go the distribution of newspapers, magazines, and books so that the local inhabitants will be able to read about the aspirations of the nation and learn something about the role they are expected to play in a democracy. They cannot formulate opinions on national issues until they learn that issues actually exist and that there is a choice open to them. As long as they are not incorporated into the national life, they cannot very well participate intelligently in it.

THE SOCIAL HERITAGE

Another factor which tends to delay the effective functioning of democratic government is what might be referred to as the "social heritage." We have observed in previous chapters that Mexico has long consisted of a highly stratified society, with the Indian masses occupying the broad base at the bottom of the social pyramid and the large landowners a small group at the top. It might be reiterated that, at the time of the Conquest, parts of Mexico were already densely populated and the Spanish institutions and culture were merely superimposed upon the Indian base. The land and other natural resources of the country gradually became monopolized by the Europeans and their descendants, and the Indians became laborers and serfs on the large plantations. Throughout most of Mexico's history special privileges have been available to persons of wealth and prestige who could influence the interpretation of the laws of the land in their own favor or could ignore them altogether. This relegation of the masses to an inferior social, economic, and political status is very difficult to overcome. It has involved not only widespread shifting of property rights and land-tenure systems but also a shift in the attitudes of the people toward the rights and responsibilities of the various social classes. It is essentially the problem of establishing equality of rights and privileges in a society that has traditionally been highly stratified. This takes a long time to accomplish. When persons rise to positions of responsibility in government, they sometimes show a tendency to demand for themselves and for their associates and friends the same special privileges enjoyed by the previous monop-

14. See chap. xvii.

lizers against whom the Revolution was fought. This, of course, creates serious problems with regard to impartial and fearless administration of the laws.

THE OFFICIAL ONE-PARTY SYSTEM

Any discussion of democracy in Mexico involves reference to the official one-party system that has controlled Mexican politics for about twenty years. This party has been subjected to so much criticism that it has reorganized twice and changed its name each time. The latest reorganization took place in January, 1946, when the name was changed to Partido Revolucionario Institucional ("Party of Revolutionary Institutions"). The election laws, also, were changed in December, 1945, in order to correct some of the more obvious defects which made it possible for the official party to exert virtual control over the outcome of elections. Reports indicate that the reorganization of the party and the changes in the election laws and procedures, together with the precautions exercised by President Avila Camacho, contributed to one of the most peaceful and adequately supervised presidential elections ever witnessed in Mexico, on July 7, 1946. Charges of fraud in the counting of votes were made; the principal losing party presented a petition to the supreme court to have the election nullified because of alleged fraud; there were undoubtedly plenty of irregularities; but impartial observers have expressed the opinion that, after allowing for whatever irregularities took place, the election would still stand as one of the most democratic that Mexico has ever held. Whether or not this is the beginning of a new era in Mexican politics can be decided only by future events.

The following discussion of the functioning of the official one-party system applies to the period 1929-45. The change in election procedures and the background of the 1946 election will be treated briefly at the end of this chapter.

The official party was originally organized under the leadership of President Calles in 1929 as an official government organ, ostensibly for the purpose of safeguarding the gains of the Revolution from reactionary forces which might conceivably get control of the government before the social reforms, for which the Revolution was fought, could be realized.¹⁵ It was argued that this one-party system, which would virtually empower incumbent government officials to choose their

15. The original name was Partido Nacional Revolucionario. This functioned until 1938, when the party was reorganized and given the name of Partido Único Mexicano. In 1946 the party was again reorganized and its name changed to Partido Revolucionario Institucional.

successors and hence give continuity to the reform programs, would function only during a transitional period pending the development of other parties also favorable to the ideals of the Revolution. No other such party developed within the revolutionary framework, however, and it has been widely claimed that the official party has exercised an outright monopoly on government positions. Actually, nothing in Mexican law prohibits the formation of other political parties. A number of them have come into existence from time to time; but, since government officials usually belong to the official party and it is generally recognized as being government-sponsored, other parties have a long record of getting nowhere at the polls.

Complaints of abuses in the electoral proceedings were made to the author from 1942 to 1945 in all parts of Mexico. These centered around the following charges:

1. It was asserted that invariably most of the voting places were supervised by members of the official party. The previous election law provided that the voting places could be opened on election day at 9:00 A.M., or whenever five electors arrived who could organize themselves into a supervising committee. Complaints were made to the effect that, through co-operation with the local government officials, who were themselves members of the official party, the official party members nearly always got control of the voting booths.

2. It was charged that ballot boxes were frequently stuffed. It was said that the electoral lists were often padded with fictitious names for whom votes were cast by the supervisory committees. Incidents were cited wherein voting credentials had been issued in the names of deceased persons and their "ballots" duly cast by the supervisors. In *La Nación*, for November 25, 1944, there appear photostatic copies of four credentials issued to four different electors, all of whom allegedly had died from four to thirteen years previously.

3. Charges were made that persons known to be unfavorable to the official party were kept from voting, through one device or another. Sometimes they were told that the supply of ballots had been exhausted; at other times the polls were closed early in the day; and not infrequently intimidation was used, not to mention outright violence.¹⁶

4. It is widely believed that the announced results of elections do not necessarily coincide with the proportionate number of votes received by the winning candidate. It was pointed out that in elections

16. A vivid account of the happenings at the 1940 presidential election in Mexico City is given by an eyewitness (Betty Kirk, *Covering the Mexican Front—the Battle of Europe versus America* [Norman, Okla., 1942], pp. 239–52).

for federal deputies and senators the final decision as to results is made by the respective legislative chambers in Mexico City. These decisions are final, and it is argued that they are sometimes based on considerations other than the actual number of ballots cast. In making the decisions, for example, complaints and protests might be taken into consideration. Critics point out that, since these chambers are composed almost entirely of official party members, their decisions are likely to be skewed in favor of official party candidates.

5. Because of these conditions, another factor which should be taken into account in discussing Mexican elections is the increasing apathy on the part of persons not connected with the official party. Hundreds of persons told the author that they did not vote because they knew that elections in Mexico were not decided on the basis of the number of ballots cast. They had become very cynical and refused to participate in what they considered a national fraud.¹⁷

Regardless of the validity of the above charges, there is no denying the fact that the official party candidates have regularly won the elections and held the government positions.¹⁸

During the period 1942-44 several incidents occurred which seemed to threaten the continued existence of the official party system. Many Mexicans thought that the end of the party had arrived when, on August 18, 1943, a candidate (Jorge Meixueiro by name) for election as federal deputy from an isolated rural district in the state of Oaxaca committed suicide on the floor of the National Chamber of Deputies in Mexico City in protest against the decision of the committee from the Chamber of Deputies which declared him defeated. Meixueiro apparently thought he had the backing of the official party in his campaign for election, but near the end of the campaign the official party encouraged another candidate to enter the race. It was generally conceded that Meixueiro was better known in the district than his opposing candidate and that he would undoubtedly win; but, in the customary manner, both candidates were required to present evidence of their election to a committee from the Chamber of Deputies. This committee usually decides who the victor is and recommends to the Chamber of Deputies that this recommendation be approved. Meixueiro felt that a decision had been made in favor of his opponent by officials of the party, even before any

17. Reports on the election of July 7, 1946, indicate that a much larger percentage of the population participated.

18. No more regularly, of course, than the Democrats in Mississippi or the Republicans in Vermont.

tions and of bringing happiness to men. However, when applied to reality, when practiced, it often does not succeed although not due to the system itself or to its philosophy. It is not that democracy betrays men, but that men sometimes betray democracy. The tragedy of modern democracies is that they have not succeeded due to the fallibility of men.

Mexican democracy has an original character which distinguishes it from all European and other American models and which consists in the advanced social reforms attempted by the Revolution, even earlier than in Russia, and which form part of our Fundamental Charter. The Mexican Social Revolution, as expressed in its doctrine, must be and is a source of pride for our democracy. The faults it may have had, or the reactions and disturbances which it may have caused, are not important. The faults are attributable, not to the reforms themselves, nor to the objectives contemplated or the ideals represented by them, but to the betrayal of those who deceitfully proclaim these reforms, but actually corrupt and distort them, making of them the instruments for personal gain and advancement. Even in times like the present when the example of integrity, honesty, and austere virtue in the public and private life of the Chief Executive who now controls the destiny of the Republic should be sufficient to restrain the bad Mexicans, the false revolutionaries under the protection of the pure doctrine of the Revolution, corrupt, mock and destroy its social conquests. These are the only inheritance of the people whom daily they plunge further into their misery while proclaiming their liberation.

The definite and rapid advancement of our democratic system in the social order is in contrast with its imperfection and backwardness in the political order. And the lack of balance between these two factors is one of the principal causes of the tragedy of Mexican democracy. In order that the social conquests proclaimed by the Revolution may become a reality instead of a false promise; in order that they may cease being the cause of discord; in order that the supreme ideal of government "of the people, by the people and for the people" may become a fact, it is necessary and urgent that a radical reform of the present political procedures take place. By this we mean that as long as there is no respect for the vote of the citizens and the electoral function is not cleansed of its vices; as long as the decisive factors in this function are a single party, the lack of respect for public opinion, the exclusion clause, gangsterism [*"pistoleroismo"*], sham and falsehood, democracy will not become a reality in Mexico. It is urgent, therefore, because it is a public clamor which springs from the hearts of the people, that a course be followed which, free from sophistries and distortion, from fallacies and simulations, guarantees effectively the vote of the citizens and insures respect for such vote. Only thus will it be possible to incorporate in ours the saving formula stated by Aristotle in his *Politics*: Give the most power to those who do most to encourage virtue.²⁰

Observations similar to those of Ahumada were made to the author in private conversation by many persons holding important positions

20. As reported in *El Universal*. At the close of Ahumada's speech a group of representatives from the Chamber of Deputies met and voted to depose him as president of the chamber and to take steps to weed him out of the official party.

in the government and generally considered as liberals. Such a point of view is also reflected in a little book written in 1944 by Jesús Silva Hérzog, who is considered an ardent liberal and staunch supporter of the Revolution and who was holding an important position in the government at the time.²¹ His thesis is to the effect that the Mexican Revolution is now facing a serious crisis largely because of the monopoly of government positions by the official party and because of the existence of widespread political and economic immorality on the part of public officials. Because his discussion coincides closely with the ideas expressed to the author in private conversation by liberals and conservatives alike and because Silva Hérzog is in a position to know whereof he speaks, it seems advisable to quote him at some length:

During the government of General Díaz there was—as was said at the time—little politics and much administration. During the period following the triumph of the Revolution precisely the opposite has occurred, particularly in the States. As a general rule no restrictions have been placed on the free expression of political thought or on the organization of parties opposed to the revolutionary regimes; but invariably the successful candidates to the Presidency of the Republic . . . to the governments of the States and to the Legislative Chambers, have been those who have had official endorsement and support. This system was perfected after the creation of the National Revolutionary Party. The defect lies in that often the selection is negative. A good many of the governors of the States and even some ministers have been either professional politicians with no other profession, or illiterate generals; and since their friends or protégés, never persons of much learning, are frequently designated to perform the high legislative functions, this explains the modest intellectual level and the not very high moral level of some provincial legislatures and of many of the members of the Federal Congress, to the detriment of the decorum and good name of Mexico.²²

Politics alters and corrupts everything. With an unfortunate frequency everything is subordinated or is tried to be made subordinate to politics: governmental action, economic convenience in matters of production and of credit, technical experience, etc. There are big, medium, and small politicians, giants and dwarfs, and they are found everywhere: in the offices and reception rooms of officials, in the schools, in the labor unions, in the co-operative societies in the ejidos. The politician is not often considerate and honest, he is only interested in personal gain, and is a profiteer of the Revolution: in the ejido he exploits the ejidatarios, in the labor unions he exploits the workers and employees, and in the schools

21. At the time the book was published, Silva Hérzog was president of the Comité de Aforos y Subsidios al Comercio Exterior (Committee on Duties and Subsidies on Foreign Commerce). He was later promoted to undersecretary of the Treasury, a position which he was holding in 1946.

22. Jesús Silva Hérzog, *La Revolución mexicana en crisis* (Mexico City, 1944), pp. 30, 31. Reprinted by permission of Cuadernos Americanos, Mexico.

he deceives his companions. It is the easiest and most lucrative profession in Mexico. Culture is not necessary, it is a detriment; what is necessary is boldness, lack of scruples and being an authentic representative of Mexican *machismo* ["maseulinity"]. Everything has been corrupted. In the ejido it is common for the peasant, exploited by the political leader, to try in turn to exploit those who are economically weaker than he is; there are many peons working the lands of the new miniature landlord: the ejidatario. There has been a lack in the ejidos, as well as in the labor movement, of political education and of good teaching not only regarding rights but also regarding social duties. In the labor organizations the immorality of a good number of leaders is notorious.²³

Obviously, Silva Hérzog is very sincere and has strong convictions concerning the lack of political morality in Mexico. Whether he has overemphasized the seriousness of the crisis we are not in a position to say. There is one ray of hope which should not be overlooked. This is the very fact that Silva Hérzog as a government official was permitted to make such a devastating criticism and to print it for general distribution, while, at the same time, he was allowed to retain his position and later was promoted to a more important one. When a government develops to the point that it will tolerate freedom of speech and of the press so that its defects may be aired to the public in such vigorous fashion, is not this in itself a hopeful sign? If the government continues to tolerate freedom of speech and if Mexicans holding important positions will express themselves as frankly and courageously on important problems of government as has Silva Hérzog, it seems possible that a body of public opinion might ultimately be built up which would demand political and economic morality on the part of politicians and government officials. The situation seems much more hopeful to the author than would be the case if freedom of expression were restricted as it is in some other countries.²⁴

THE MORDIDA

Perhaps the most serious obstacle to the democratic functioning of government is the widespread use of what the Mexicans call the *mordida* ("bite"). While the term *mordida* is in common use in most parts of Mexico and there is no question whatsoever about its meaning, there is no adequate translation for it in English. Perhaps the three terms "bribery," "graft," and "extortion" together would come close to

23. *Ibid.*, pp. 33, 34. Reprinted by permission of Cuadernos Americanos, Mexico.

24. In this connection, it is undoubtedly because of such criticism that the official party was reorganized and that new election laws were enacted. These laws are discussed later in this chapter.

indicating its scope. It might be referred to as "bribery" when government agents close their eyes to infractions of the law upon receipt of a stipulated sum of money from the offender; it could be called "graft" when business transactions require approval of government officials and they refuse to legalize a transaction until they have succeeded in exacting a fee for themselves or their superiors from the person wishing to do business; and it could be called "extortion" when government inspectors deliberately threaten to turn in false reports concerning innocent persons or firms unless they are paid a sum of money in return for making a true report. All three types of *mordida* are reportedly widespread in Mexico and especially in the vicinity of Mexico City. The amount of money which a given *mordida* may involve may vary in size from a few centavos to several hundred thousand pesos, depending upon "what the traffic will bear." The practice of the *mordida* is so firmly rooted that it is practically institutionalized. In the author's opinion it has been one of the greatest single obstacles to the accomplishment of the ideals of the Mexican Revolution. It is so serious that unless it is stamped out soon it might possibly undermine the entire moral fabric of the nation.²⁵

The dilemma which the *mordida* presents to the ordinary taxpayer may be illustrated by an actual case involving a neighbor of the author's. He came into the author's home in Las Lomas de Chapultepec in late 1943 and asked permission to use the telephone. He said that two tax assessors were in his house threatening to raise the tax assessment on his new home. He asserted that he had paid a *mordida* of two hundred pesos to a different assessor the previous year in order to have his home assessed at a low rate, and he wanted to call this man's office and have him intercede for him. Admitting a low assessment, he said he would not object in the least to having it raised considerably if he thought that would end the matter; but he expressed the conviction that if the assessment were raised he would still be required to pay a *mordida* when the next assessor came around; otherwise his taxes would rise out of all proportion to the value of the property. He argued, therefore, that his only hope of breaking even was to keep the assessment low enough so that a substantial *mordida* occasionally added to his tax bill would not make the total unduly high. He was

25. President Miguel Alemán has pledged his administration to insist upon integrity on the part of government officials and may enact severe measures in an effort to stamp out the *mordida*. The present discussion of the *mordida* is based on conditions existing prior to December, 1946. It is too early to tell what effect the Alemán administration will have on it.

unable to make contact with the previous *mordelón*²⁶ and so returned home. The next morning he reported to the author that the assessment was left unmolested but that in order to obtain this favor he had had to give each of the two assessors fifty pesos as a *mordida*. Thus a substantial proportion of what might have been public revenue went into the personal pockets of government representatives.

Another very common form of the *mordida* grows out of laws which require that business firms have their records inspected periodically by government inspectors. Businessmen have reported to the author that frequently the inspector pretends to find something wrong with the books and implies that a severe penalty in the form of a fine could be inflicted if the "irregularities" were officially reported. A process of negotiation then begins, and the inspector agrees that for a specified sum, sometimes as much as several hundred pesos, depending upon what he thinks the traffic will bear, he will overlook the "irregularities" and report that the books are in good order. The businessmen claim that they have found from sad experience that paying the *mordida* is much cheaper than going to court, even when they know that their books are in good order.

Reference to the *mordida* as a widespread and well-established institution will not be news to Mexicans, since they themselves are the best analysts and critics of this custom. A clear description of the problem of the *mordida* is given as an editorial in *El Universal*, one of Mexico's leading newspapers, dated November 27, 1936, and entitled "The Fight against the *Mordida*."

To public should denounce the corruption of inspectors, policemen, collectors and agents of all the offices of the Department of the Federal District, first in the work of the Chief of the said Department, according to international principles, demanded by the great of this city. It often happens that in order to avoid difficulties in order not to lose their time in defending themselves of false accusations in order to avoid a fine or obtain a real or supposed job or the interest of persons pay arrears, sometimes of importance to such representatives of the authorities and thus induce them to neglect their duties.

The officials are threatened that such practices shall end not only for the good of collective morality, but also because financially them the public treasury loses a large sum each year since each violation of the law that is tolerated through bribery of the agent charged with its enforcement means money that are to reach the hands of the Department.

If the people will cooperate with the authorities of the District by reporting such corrupt practices they would not become the accomplices of the corrupt employment of authorities the people would then contribute toward a

²⁶ *Mordelón*, usually means "one who bites", in other words is a one who sucks a *mordida*.

better Administration, the corruption of which they complain of so frequently. The attention which the Department of the District would give to the denunciations which, according to the Chief of the Department, it is desirable that private individuals present, may be inferred from the information given regarding the shameful loot of which the Cuervo family were the victims, just after having suffered misfortune, and for which the members of the radio patrol car No. 12 seem to have been responsible. Detailed investigations are being made to establish the facts—it is said—and as soon as it is determined that the accused policemen are guilty, they will be turned over to the Office of the Attorney General of the District, after being dismissed from their positions.

It is to be supposed that the same will be done each time that a complaint is made against an agent of the Department, which would represent an improvement since the practice heretofore has been to pigeon-hole such complaints. . . .

Is the apathy with which the inhabitants of the metropolis—and perhaps even more so the people of the rest of the country—allow themselves to be blackmailed by government agents of all ranks, to be attributed entirely to lack of civic courage? We doubt it. In our opinion this apathy is an example of a fundamental economic principle which might be expressed thus: trying to achieve results with a minimum of effort.

The people do not denounce the inspectors, examiners, collectors, watchmen, appraisers, policemen, traffic agents and other specimens of the swarming fauna that feeds on them because it is a more economical procedure to allow themselves to be stung than to expose themselves to be bitten; or in plain words, because resistance to such exactions would involve, as a general rule, paying many times more.

A person who refuses to give a tip to an employee who menaces him by accusing him falsely of infringing the law or who delays the completion of an administrative matter, lays himself open not only to immediate trouble involving larger amounts, but also to being the future victim of an endless series of reprisals for his denunciation. And so much the worse if he complains. Since the *mordida*, besides being an institution, is also a fraternity, there is a maximum of probabilities that the denunciation will fall in a hostile atmosphere, no matter where it is made; that the investigators will try to burden the denouncer with citations, proceedings, and loss of time; and that, finally, they will decide that there is insufficient evidence. With this decision, especially if it is made by a court, and thus takes on the appearance of legal truth, the accused is in a position to turn against his accuser and raise his *mordida* to the third power.

Whoever believes that the above statements are due to extreme pessimism, will please mention even three cases—or perhaps we might reduce it to one—in which an accusation presented against a *mordelón* of any rank whatever may have been successful. One should not of course include those presented by influential persons or powerful politicians, for these produce annihilating effects on the accused. . . .

The public does not doubt in the least that as soon as anyone gets the idea of denouncing a dishonest employee, a mercenary judge, a voracious purchasing agent, or an official who does business with preferences, purchases, or contracts

for public works, official declarations of a high moral tone will be made, the report of the case to the Office of the Attorney-General will be announced, inexorable justice will be promised, and one of two things will happen: either at the end of a couple of months no one will remember the case, and the accuser begins to suffer the consequences of his optimistic public spirit; or, after a convenient period of time has elapsed, the judicial authorities find that there is no crime to be prosecuted, and the accused satisfies the appearances or perhaps his conscience by having the decision published; with which he will consider his honor restored and will be ready to continue his dishonest career.

The most serious of all aspects is that the public in general admits that this is so and considers it the most natural thing in the world. On the contrary, those who are the objects of their ridicule are the fools who are so simple as to believe that it is possible to eliminate the *mordelones* by offering resistance and making denunciations—because everyone agrees that such practice is equivalent to throwing good money after bad. And the *mordida* goes on without either the victims or their oppressors believing that anyone is thereby acting dishonestly.

We must therefore insist that this is not a local or partial problem . . . there is a great variety of types and species of all sizes and using the most diverse techniques. In order to eliminate the little fellows it is necessary to start with the big ones. And therein lies the almost insurmountable difficulty of the task. This does not mean, of course, that the moral exhortations of the authorities of the District should not be entitled to enthusiastic support and that we should not all contribute to their success.

The author has heard complaints regarding the widespread use of the *mordida* in almost every part of Mexico. In one state he was told by an experienced educator that "our greatest problem in this state is that every four years²⁷ we find ourselves obliged to turn out a rich governor. In the process of becoming rich, he bestows costly favors on relatives and friends, and he must also allow his subordinates to take at least enough to keep them quiet. This continuous process siphons off a substantial proportion of our surplus which might otherwise go to the support of public institutions. Would to God that a rich man would run for office!" When the author visited the state of Sonora in the spring of 1943, he was met with the following statement in almost every hamlet, village, and town where he went: "We are so glad that ex-President Abelardo Rodríguez is going to be our next governor because he is already a rich man and therefore won't need to accept so much graft as our previous governors. Perhaps he will be able to do something for the state of Sonora."²⁸ In other words, the people ap-

27. The term for governor of any state has now been changed to six years. There is no re-election.

28. They also gave other reasons why they wanted Abelardo Rodríguez. One was that he is a very efficient businessman and has had much experience in administration. He would also carry to the state the prestige of having been the president of the Republic.

with increasing industrialization. In 1944 many public employees were receiving only 150 pesos a month (about \$30). Directors of federal agencies were receiving only 830 pesos a month (about \$170).³⁰ Despite the existence of these low salaries, living costs, including rent, food, and clothing, were about as high in Mexico City in July, 1945, as in many cities of the United States. Yet these workers are expected to dress well, to maintain their families (frequently large), and to put on a bold front to the public. They are eager to maintain dignity and self-respect. They would feel disgraced if required to meet the public in shabby clothes. When their trousers become threadbare, their shirt collars worn, and their monthly incomes exhausted through the regular expenditures for food and shelter for the family, they are sorely tempted to try some alternative method of supplementing the income. When such persons are intrusted with handling funds, the temptation sometimes proves too great for their powers of resistance, especially when the example of their superiors is such as to invite taking advantage of opportunities for personal gain. A local traffic policeman, for example, usually receives about 180-200 pesos (about \$37-\$41) a month. On this meager salary he must purchase his uniform, keep it well pressed and in good condition, and support his family. He soon discovers that when motorists are arrested for traffic violations they usually prefer to give him a few pesos rather than go to the inconvenience of making a personal trip to the police station. He finds that these few pesos enable him to meet the additional costs of maintaining his dignity, and before long he may find himself making a special contribution to his superior officer for the privilege of being stationed at one of the more busy corners so that the extra pesos may flow in with greater frequency.

A third factor is the willingness of the general population to pay a *mordida* rather than go to the time, expense, and trouble of complying with the law or of insisting that their rights under the law be respected. This aspect of the problem is discussed in the foregoing editorial.

Finally, many Mexicans assert that the problem of doing away with the *mordida* is doubly complicated by the existence of the official party system of government, as previously described. They argue that if there were strong rival parties, one of them might well take as its campaign slogan, "Death to the *mordida*." It might then whip up public enthusiasm and make a clean sweep of all government offices.

30. In 1944 the author was informed that the official salary of a cabinet minister amounted to only about 1,100 pesos a month (about \$227).

They claim, however, that it is impossible to stamp out the *mordida* under the official party system because elections result largely in a shift of officeholders from one office to another and that any new blood that enters comes in under obligations to the old. Their argument is that any executive who might attempt to outlaw the *mordida* would alienate his most staunch supporters.

Many prominent Mexicans are greatly concerned over the demoralizing effect of the *mordida* and related forms of graft on the whole moral fabric of the nation. This alarm is vigorously expressed by Silva Hérzog who, as stated previously, in 1946 held the important position of undersecretary of the Treasury in the federal government. He contends that "the problem of Mexico is above all a problem of honesty":

Immorality is most alarming in the Federal Public Administration, in the States and in the Municipalities; the gangrene has spread either from top to bottom or from bottom to top. The public officials who have accumulated fortunes in a few months without losing their respectability are numerous. This is the worst of the evils, the alarming symptom of a society which is disintegrating. When a social group punishes the prevaricators, there is hope of putting an end to the harm; but when instead of punishing them it remains indifferent to the prevarication and even applauds the prevaricator in public places, then that social group is decadent and is in grave danger of disappearing as an autonomous entity. In this aspect the crisis of the Mexican Revolution is extraordinarily malignant and is above all—let me repeat it a thousand times—a moral crisis with few precedents in the history of man.³¹

A similar point of view was clearly and forcefully expressed in an address on July 18, 1946, by Vicente Lombardo Toledano, prominent labor leader in Mexico and president of the Latin-American Confederation of Labor. In this address he asserts that the Sinarquista movement and Acción Nacional³² are, in a sense, daughters of the Mexican Revolution, even though this may seem paradoxical. He says:

31. Silva Hérzog, *op. cit.*, pp. 30, 31, and 33–35. Reprinted by permission of Cuadernos Americanos, Mexico. Silva Hérzog, as well as many other persons who argue that there is a wide discrepancy between Mexico's revolutionary ideals and her practice with reference to internal affairs, are very complimentary concerning the exemplary manner and the consistency with which her foreign policy has been conducted. The latter is appraised by Silva Hérzog as follows:

"In the matter of foreign policy, Mexico occupies a different position. In this respect the line of conduct has been exemplary, worthy, and patriotic. From Carranza to Avila Camacho, Mexico has always been on the side of the just causes. Remember, for instance, the cases of Abyssinia, Austria, and Spain. Some times we have been alone, completely alone, but invariably representing international justice" (*ibid.*, p. 31).

32. Acción Nacional is a conservative political party which has consistently criticized the policies of the Mexican government in recent years. The Sinarquista movement is discussed in chap. xx.

It is true that they [the Sinarquistas and Acción Nacional] would have existed anyway because of international reasons which I have mentioned and with which we are all familiar; but it is also true that if there were not all this state of corruption among the men of the Revolution, extending from cabinet positions down to policemen, reactionary forces would have less influence in our country. The corruption of many revolutionaries, enrichment and abuse—all this has stimulated reactionary forces. The bad agrarian leaders who deprive the ejidatarios of their lands or of their right to work, . . . the shameless labor leaders who make “deals” with employers or sell out strikes; the professional politicians who can’t afford to leave politics, not because of the salaries they receive but because of the graft [*buscas*] they get, . . . the eagerness to become mayor, state deputy, then federal deputy, then senator, and then governor—without the consent of the people—then return to senator, to federal deputy, to state deputy, and to mayor.³³

The millionaires within the revolutionary sector; the newly rich of the Revolution. . . . All of this aggravates the conditions of struggle in which we live: but those thieves and prevaricators are not the Revolution. The only way for Mexico to go forward is to purify the revolutionary sector uniting the left-wing forces with the best in the country. It is time, I repeat again today with the conviction I have always had, with the conviction of a militant of the laboring class, it is now time that thieves be driven out of the Government, that thieves be driven out of the revolutionary sector, and that honest people with moral authority associate together for the purpose of saving the Revolution and of saving the future of Mexico.³⁴

A hopeful sign appeared in 1945 with respect to action against the *mordida*. Complaints had been made for three years to the effect that government officials were exacting fees from some of the Mexican laborers wishing to go to the United States to work as farm hands or as workers on the railroads. The fee was illegal; it allegedly went into the pockets of politicians as a “price” of certification. It was repeatedly charged that certificates were being sold to the highest bidders. Complaints became so widespread and vigorous early in 1945 that an investigation was made. Three deputies to the national legislature were accused and convicted of accepting money illegally from the laborers. This was a shock to politicians and laymen alike. Nothing like this had happened before. Many wondered whether or not public officials had at last become courageous enough to declare war on the more conspicuous and overt manifestations of the *mordida*. They

33. There is a law against being re-elected to most important government positions. Usually, however, there is no objection to one’s running for an office which he has formerly held, provided that time has elapsed. In other words, the objection is to his *continuing* in office for more than one term. This frequently results in the shifting of politicians from one office to another.

34. Reported in *Hispano americano*, July 26, 1946, p. 20.

hoped that this was the beginning of a campaign to stamp it out. The more cynical, however, attributed the action to mere political manipulations and declared that the *mordida* was so deeply imbedded in the customs of the people that it could never be uprooted.

President Miguel Alemán has pledged his administration to work for honesty in government, and if he carries out his promises the *mordelones* soon may be running for cover. He recently announced that during his administration "those in public positions who break the laws of honesty and decency will be punished. We shall be inflexible; neither name nor position will deter us from imposing sanctions on the dishonest and the immoral."³⁵ In his inaugural address, President Alemán said: "Morality is a heritage of the people just as important as natural resources. . . . The cabinet ministers will set an example in the fulfillment of these purposes. Each one of them, in accepting his appointment, has formally pledged himself to guard efficiency and honesty in the branch of government under his jurisdiction."³⁶ More than mere promises are essential, however, to root out the *mordida*. It is so widespread among government officials that it is virtually regarded as an expected pattern of behavior.

The author knows of no estimates concerning the impact of the *mordida* on public funds that would be available, otherwise, for public institutions, but the amount involved must be of considerable importance. When money that should go into the public treasury goes, instead, into the pockets of politicians and their friends, there is that much less with which to finance public institutions.

LACK OF FINANCE FOR MUNICIPAL INSTITUTIONS

A final factor which tends to limit the functioning of local democratic institutions in Mexico is the lack of adequate finance for the municipalities. Generally speaking, the rural municipalities have very few funds of their own with which to operate. They are almost entirely dependent on federal and state funds for any permanent community improvements. This is partly because their powers of taxation are limited to those items specified by the state legislature. Usually states and federal government reserve for themselves the right to tax real estate, and in areas where widespread poverty prevails there is little else that will yield revenue. The municipalities are therefore placed in the situation of being so heavily taxed by outside agencies that they are unable to make effective use of their own theoretical powers of

35. *Ibid.*, September 20, 1946, p. 4.

36. *Ibid.*, December 6, 1946, p. 4.

taxation for the benefit of local institutions. The situation of many of the municipalities is similar to that in a rural area described in a letter from a *presidente municipal* in the state of Puebla, quoted by Loyo:

. . . . The economic situation is precarious, since the principal tax, which is on the slaughter of cattle, is the only one which produces an income for the support of the one employee available for the transaction of all municipal functions. Although it is true that the tax program contains other provisions, their income is irregular and insignificant, and not sufficient to undertake any improvements in the municipality; those carried out in the past were due to the system of forced labor and monetary donations, which now have stopped due to their being forbidden by the General Constitution as well as by the State Constitution. There are therefore no public works in progress or even planned, due to the poverty of the finances of this municipal government, since the State absorbs most of the taxes from which certain sums are allotted to the municipalities. . . .³⁷

Commenting on this situation, Loyo says:

As may be seen, many municipalities protest because they see the money disappear into the pockets of the State government, while they participate only in a very small measure or not at all. They need a larger income. Not being able to obtain it and desiring to bring about some improvement, they resort to the solution of a primitive society: the personal labor of the inhabitants to build roads, schools, etc. The Constitutions forbid this; yet one municipal president proposes that the municipalities be empowered to require the personal labor of its citizens within certain age limits during four days each month. The Constitutions are beautiful. Their philosophy is profound; but a humble municipal president proposes in 1934 that municipalities be given the power to require personal labor, and that village president knows that the cathedrals and the great public works of colonial times were possible only through such means. The municipal governments complain, with increasing insistence, that the financial resources which used to be theirs are now absorbed by the State and Federal Governments.³⁸

As suggested earlier, some of the financial difficulties of the municipality in certain areas may be due in part to the small size of the governing unit. In such areas the combining of small municipalities into larger units would make possible the pooling of what resources do exist. There appears to be urgent need, however, for a re-examination of the entire system of public finance, especially in the smaller communities.

REVISION OF ELECTORAL PROCEDURES

While the foregoing obstacles are real and interfere seriously with the effective functioning of democracy in Mexico, they are not of universal application, nor are they insurmountable. In spite of all the dif-

37. Loyo, *op. cit.*, pp. 333, 334.

38. *Ibid.*, pp. 334, 335.

difficulties described, the masses have succeeded in making many of their wants known to the various governments in power, and no administration dares to ignore them.³⁹ Each pledges itself to relieve the burdens of the peasants, to furnish land for the landless, and to provide schools for the illiterate. It is unlikely that they would remain in power long if these needs were ignored.

As noted before, criticism concerning the lack of political democracy in Mexico has been so widespread in recent years that steps have been taken recently by the Mexican government to correct some of the more serious obstacles to democratic procedure. The new election law enacted in December, 1945, eliminates some of the more obvious defects of the previous legislation. The new law⁴⁰ creates a Federal Commission of Electoral Vigilance (Comisión Federal de Vigilancia Electoral) with headquarters in Mexico City. It is the duty of the commission to supervise election procedures. There are also state and local commissions and electoral district committees, all of which are responsible to the national electoral commission. A national board has been established for the purpose of compiling the electoral lists and demarcating electoral districts. This board consists of the director-general of statistics, who is chairman; the director-general of population; and the postmaster-general. The personnel of this board appears to have been wisely chosen, and it seems likely that the lists will be much more accurate and complete than ever before. The board is required to have the electoral lists revised prior to each election.

A very important improvement has been made in the new law with reference to the designation of supervisory committees for the polling places. Heretofore, the first voters to arrive on the morning of election day could organize themselves into a committee to supervise the elections and count the votes. This usually resulted in conflicts and in charges to the effect that the official party always managed to get control of the polls. The new law provides that the electoral district committees must call together representatives of the various political parties, which are duly registered and authorized to participate in the elections within the district, to try to get them to agree on the membership of the committees to supervise the various polling places. If such an agreement is reached, the personnel agreed upon by the political parties will be designated as the supervisors. In case no agreement is reached, the district electoral committee is authorized to des-

39. Hubert Herring, *Good Neighbors—Argentina, Brazil, Chile, and Seventeen Other Countries* (New Haven, 1941), pp. 309, 310.

40. The new electoral law is given in the *Diario oficial* of January 7, 1946.

ignate a chairman and a secretary and several tellers for each of the polling places of the district. In either event, those appointed must be local citizens who live in the vicinity in full enjoyment of the political rights, who are of recognized integrity, who have an honest means of making a living, and who possess the necessary intelligence for discharging their functions.

Penalties have been prescribed for violations of the procedures set forth in the electoral law. A fine of 10–300 pesos, or imprisonment for three days to six months, or both, and suspension of all political rights for a year are prescribed for the following:

1. Anyone who without just cause refuses to be inscribed in the electoral census, or who refuses to vote in the elections to which this law refers, or who refuses to discharge his electoral duties.

2. Anyone giving false information in the Register of Voters or who tries to register more than once.

3. Anyone who on the day of election distributes political propaganda at the polls, or at any place within a distance of 200 meters of the polls, in favor of some candidate or party.

4. Anyone, whether he is an elector or not, who comes to the polls bearing arms.

Imprisonment for one month to a year, or suspension of all political rights for two to six years, or both, are prescribed for:

1. Anyone who prevents another from being inscribed in the electoral lists, voting in the elections, or discharging his duties in connection with the election.

2. Anyone who illegally obtains the inscription or cancellation of a name on the electoral list.

3. Anyone who votes twice, either in the same or in separate booths, or who takes the place of another in voting.

4. Anyone who has electors under his authority or economic control and forces them or obligates them to vote for a specific candidate.

5. Anyone who falsifies, alters, or destroys in any way a voter's credentials.

6. Anyone who in any election buys or sells a vote or presents a false ticket.

There is also a fine of 300–1,200 pesos, or imprisonment for six months to two years, or both, for anyone who prevents the polls from being installed or opened at the appropriate time, or who interferes with the functioning or closing of the polls in accordance with the law.

Thus it is apparent that some of the criticism that was referred to

earlier in this chapter has been taken into account in the writing of the new law. The principal criticism of the new law is in the composition of the personnel of the Federal Commission of Electoral Vigilance. The law states that this commission is to consist of six members, including the secretary of the interior (*Secretario de Gobernación*), who shall be chairman, and another cabinet minister appointed by the president; two members of the legislative branch—one senator and one deputy—appointed by their respective chambers or by the permanent commission; and two representatives of political parties. The critics argue that it would have been much fairer to have appointed laymen to this commission instead of the four government officials who are likely to be members of the official party. They argue that, in addition to the four officials, one of the representatives of a political party will also be a member of the official party and hence the ratio will be 5 to 1 in favor of the official party. They fear that this will tend to result in interpretations and rulings favorable to the official party just as was the case prior to the enactment of the new law.

It is much easier to make laws than to enforce them. The first crucial test of Mexico's new election laws came on July 7, 1946, when the national election was held. Miguel Alemán Valdés, former secretary of the interior, was the presidential candidate of the official party (P.R.I.) and won the election by a large majority. His chief opponent was former Foreign Minister Ezequiel Padilla, who received many more votes than any previous opposition candidate. It should be pointed out that both Alemán and Padilla are civilians and that neither is an army general. This in itself is a distinct innovation. About a dozen political parties participated in the election, although only a few offered a presidential candidate. During the campaign Alemán visited every state in the Republic and became intimately acquainted with Mexico's problems. He repeatedly asserted that he wanted an honest election and would welcome representatives of the opposition parties into the Chamber of Deputies and the Senate if elected.⁴¹ President Avila Camacho designated the army to police the elections and enforce compliance with the rules of procedure. Many more persons participated than were expected. Adequate preparations had not been made. There were not enough voting booths. Long lines of voters were formed, and some had to stand in line from three to six hours. Some booths ran out of ballots, and some voters became discouraged and went home without voting.

41. Several representatives of other political parties were elected to the Chamber of Deputies.

Although the voting was peacefully conducted, there were protests concerning the results. Charges of fraud in the counting of votes were made, and officials of the principal losing party (P.D.M.) petitioned the supreme court to have the elections annulled. They received a negative answer. Charges of irregularities were officially investigated, and in three or four minor districts elections were nullified; but, in general, the elections were declared valid. The results of the presidential election as announced officially are shown in the accompanying tabulation.

Candidate	No. of Votes	Per Cent of Votes
Miguel Alemán Valdés	1,788,901	77.9
Ezequiel Padilla	449,357	19.3
Twenty-seven other candidates combined	64,470	2.8
Total	2,294,728	100.0

As a result of the election, several members of opposition parties were installed in the national Chamber of Deputies, including 4 members of Acción Nacional, 1 Sinarquista, and 3 from other parties. Obviously, the one-party system of government is not yet supplanted, although it is encouraging to learn that at least a few members of opposition parties are now tolerated. This looks like an important step forward.

PART V

Conclusion

CHAPTER XXII

Conclusion

NEARLY four decades have elapsed since the Mexican Revolution broke out in 1910. About ten years of this period were consumed in widespread armed conflict; the rest of the time has witnessed attempts to bring about the social conditions embodied in the revolutionary ideals. This concluding chapter attempts to summarize a few of the major accomplishments of the Revolution and to restate some of the problems which remain to be solved before the avowed "ideals of the Revolution" can be said to have been achieved.

The revolutionary program has attempted to confer responsible proprietorship on a large segment of the population who previously had experienced little more than serfdom. It is unreasonable to anticipate that such a transition could come about rapidly or smoothly. Initiative, self-reliance, and sound judgment cannot be developed overnight or be bestowed automatically upon an illiterate population that has been steeped for ages in the peon-patron tradition of relationships wherein the former renders only servile obedience to the latter.

The Mexican Revolution must be considered as a long-term process undertaken and guided in the interests of the long-time public welfare. It has involved a rearrangement of property rights and a reshaping of social institutions and programs for the benefit of the masses of the population. It must be viewed in perspective. It must be evaluated in terms of likely alternatives, as well as in terms of ideal standards. One must continuously ask himself the question: What would be the situation in Mexico if the Revolution had not taken place? When the achievements and failures of the Revolution are balanced against each other and when they are considered with reference to the likely alternatives that would have prevailed, one is led to the conclusion that, despite all the mistakes that have been made and the injustices that have been committed, there is still a net positive balance in favor of the revolutionary program. It is true that the attainment of many of the avowed objectives has been retarded, if not com-

pletely thwarted, through lack of planning, through lack of courage to enforce the humanitarian legislation which has been promulgated, and through the attempts of some public officials to make big business out of the Revolution; nevertheless, the stage is now set for the development of more democratic institutions and for the development of responsible proprietorship, and it is the author's opinion that these developments will gradually materialize.

That many of the accomplishments are still matters for the future, however, is indicated by Silva Hérzog in his penetrating analysis of the crisis of the Revolution. He asks himself the very important question: "After all of the revolutionary struggles and the activities of the various revolutionary governments, have we succeeded in improving the standards of living of the Mexican people?" His answer is worth repeating:

In our opinion the answer is timidly in the affirmative. Something has been accomplished but much less, very much less, than could have been expected.

We do not ignore the difficulties of the problem, nor are we unaware of the fact that it is not an easy task to provide, within the space of a few years, an abundant life for a people long hungry, ragged, and exploited. The level of living of the skilled worker employed in the large industries has been raised somewhat; the economy of the peasant has also been improved in a few agricultural regions; but a considerable number of inhabitants in the cities and in the country districts who perhaps make up the majority have not had their real incomes increased and they have not participated in the benefits of the work of the Revolution. In some isolated regions there are people who live now just as their ancestors lived fifty, one hundred, or three hundred years ago without adequate nutrition, without education, and without any faith in government officials. We have not accomplished what should have been done, nor what could have been done. . . .¹

The author finds himself in substantial agreement with Silva Hérzog. Any statement concerning the success of the Revolution must be qualified by certain reservations. Much more could and should have been accomplished if adequate plans had been prepared and if the administration of the various programs had been efficiently and wisely conducted at all times. Unfortunately, human weaknesses have sometimes tended to overshadow the many positive contributions of the programs. Some have used the ideals of the Revolution as a tool for chiseling out for themselves and their friends a safe and permanent seat among the *nouveaux riches*. Fortunately, however, the exploiters constitute a small minority; there are thousands of others who

1. Jesús Silva Hérzog, *La Revolución mexicana en crisis* (Mexico City, 1944), p. 26. Reprinted by permission of Cuadernos Americanos, Mexico.

king conscientiously and vigorously to put the ideals into effect. The mistakes and abuses should not serve as justification for regarding the entire Revolution a failure. In spite of the defects in the organization and administration of the programs, the author is of the opinion that the masses of the population are much better off than they would have been under the feudal type of organization which existed prior to 1910.

The great land monopoly which has plagued Mexico since colonial times and which reached its height under the regime of Porfirio Díaz has now been broken. There still remain many large private holdings in various parts of the country, particularly in the semiarid regions, but without water the land is not suitable for cultivation; but the general situation wherein about 90 per cent of the rural population had no land whatsoever, while a small minority owned or controlled almost all the land resources of the nation, has now been rather completely liquidated. The ejidatarios have possession of about half the land and 22 per cent of all the land that was censused in 1940. In addition to the ejido program, small farms have been created out of land made available through national irrigation and colonization programs. The Mexican government is pledged to continue to bring new lands into production through irrigation and colonization.

In 1940 there were 1,601,392 ejidatarios, and the total population of the ejidos amounted to 4,992,058 inhabitants, or one-fourth the total population of Mexico. In addition, there were 928,593 small private landholders having plots of 5 hectares, or less, in size. If we assume that the population on these small private holdings is distributed about the same way as on the ejidos, it would mean that approximately 2,594,424 inhabitants live in families having access to land and that 40 per cent of the total population of Mexico live on the ejidos or on small privately owned holdings of 5 hectares or less. This indicates a high degree of land diffusion among the population, in contrast to the land monopoly that existed previously. Nevertheless, there are still many rural families who have no land, and many sons and daughters of the ejidatarios becoming of age are left with little or no land available for them. Some land will be made available in the future through continuation of federal construction, irrigation projects and through drainage and material control in sparsely populated coastal areas, but it is unlikely that these

indicated in chap. viii, there are also 200,336 private landholdings with more than 10,000 hectares. There are 1,472 holdings with more than 10,000 hectares and there are 1,472 holdings with more than 40,000 hectares each.

lands will be developed fast enough to take care of the needs of a rapidly increasing population. The cry of *tierra y libertad* is likely to continue until industrialization develops to the point at which it can absorb the surplus rural population and until efficient techniques of farming have become widespread enough to increase the present low yields of crops far beyond those realized by the present inefficient techniques that are generally practiced.

Mexico has not yet solved the problem of efficient agricultural production on the ejidos. Some ejidos are operating efficiently, but the vast majority are operated on a subsistence basis, with the crop land providing a little corn for household use and the pasture land maintaining a few head of livestock, usually of poor quality. Very few products are realized for sale. In most cases the peasants were given land without any equipment for working it; and they have had no training or experience in preparation for the transition from peon to proprietor. Ancient and inefficient techniques of production are widely used, and in many instances the parcels of land given to ejidatarios are either too small or too poor in quality to produce a living for the family with the existing techniques of production.³ On some of the collective ejidos, where the land is of good quality, efficient production sometimes is handicapped by lack of efficient management and by lack of discipline among the workers. The devising of effective methods of stimulating efficient agricultural production on the ejidos is one of Mexico's most serious and urgent problems.

The government has attempted to provide agricultural credit for the ejidos through a national Ejido Bank. The needs have been far greater, however, than could be supplied up to the present. The Ejido Bank is therefore working with only about 15 per cent of the ejidatarios, while, with a few exceptions, the rest have no way of getting credit except at an appalling rate of interest. High interest rates for credit to the ejidos are due partly to the fact that the land cannot be mortgaged or transferred and production is often insufficient to provide the necessary surplus with which to pay off a loan. The Ejido Bank is concentrating its loans largely in restricted areas, where a good deal of supervision can be given, in the hope that, little by little,

3. The administration of President Miguel Alemán is pledged to work for greater efficiency in agricultural production by encouraging the use of farm machinery and by increasing the size of the ejido plots to the equivalent of at least 10 hectares of irrigated land per person. The increase in the size of plots, of course, will apply mostly to ejidos granted in the future. It would be impossible in the foreseeable future to reshuffle all the existing ejidos so that the 1,601,392 ejidatarios now holding lands would have larger plots.

areas may be developed into efficient producing units so that production will be sufficient to warrant the investment of capital. In a few areas this policy seems to be meeting with success. In these areas ejidatarios are meeting payments on their loans promptly and are receiving credit each year in increasing amounts. In some of these areas the most modern of farm machinery and agricultural techniques are used. Extension of those practices to ejidatarios in general, however, is a matter to be hoped for but one which may take generations to accomplish.

One of Mexico's most serious problems is the rapid depletion of her soil. This began many generations before the agrarian program came into existence, but the author is convinced that its seriousness has been aggravated by the agrarian program. The Mexican peasant generally is unaware of efficient land-use practices. He cuts down the timber on the steep slopes and replaces it with row crops. Overgrazing is conspicuous in many areas, and much of the land is furrowed by deep gullies. Competent soil specialists report that in some of the more densely populated areas much of the topsoil has already been washed away. The federal government has recently organized a soil-conservation service which is carrying on demonstration projects in various parts of the country. A good beginning has been made, and modern methods are being used; but the program is on a small scale, while the needs are tremendous. It will take a long time, even with a broad educational program financed by adequate resources, to correct the wasteful land-use practices that have been in effect for centuries.

The net effect of the revolutionary programs on the agricultural productivity of the nation is very complex and difficult to measure. Production appears to have declined for a few of the basic commodities such as corn, wheat, and beans, but many other products have come into production which more than counterbalance these. Production has greatly increased for such products as pineapples, bananas, tomatoes, rice, sugar cane, cotton, chickpeas, and cattle.⁴ Mexico has imported corn and wheat in recent years; she also did so very often during the Díaz regime. Her total exports of agricultural products, however, are greater than during the Díaz regime, even though by 1945 the population had increased 46 per cent over 1910. Thus there appears to be ample evidence that total agricultural production has increased since the Revolution. This does not mean that production is more efficient on the ejido than on the hacienda. The increase

4. As noted earlier, the outbreak of hoof and mouth disease which began in 1946 may seriously interfere with cattle production for some time to come.

may be due in part to the bringing of new land into production through irrigation projects, to the more intensive use of lands that formerly lay idle on the hacienda, to more efficient farming on small private holdings resulting from the breakup of the hacienda, and to the shift in certain cases to products better adapted to the soil. At the present time, production appears to be less efficient on the ejidos than on the private holdings. Data in chapter x indicate that the total production of cotton per hectare in the Laguna region has never been so high since expropriation as it was before and that production per hectare is lower on the ejidos of the region than on the private holdings. The total production in the area has increased, however, and all admit that business activity is much greater in the Laguna region now than ever before. This suggests that the profits from agriculture are being distributed more widely among the local inhabitants instead of being spent in European capitals by the former landlords.

Although an analysis of labor organizations has been outside the scope of this work, an appraisal of the Revolution requires at least mention of the gains made by organized labor. Only 10.9 per cent of Mexico's gainfully employed in 1940 were industrial workers, but the index of industrial production is rising rapidly, and this appears to be one of Mexico's principal hopes for the future. President Miguel Alemán has pledged his administration to work for the transformation of Mexico into a modern industrial nation, and rapid developments may take place toward this end in the near future. Labor has made important gains as a result of the Revolution. So important are these gains that there are probably few, if any, countries in the world now which have more liberal legislation for labor than Mexico. Article 123 of the Mexican Constitution is a veritable Bill of Rights for labor. It permits workers to organize into labor unions, makes collective bargaining mandatory, and gives labor the right to strike.⁵ Minimum hours and wages are prescribed, and a worker cannot be discharged without payment of three months' wages in advance.⁶ Perhaps no large segment of the population has benefited more as a group from the Revolution than has organized labor. It is true, however, that in-

5. While labor has the right to strike, picketing by labor is unnecessary. When a strike is called, a committee is appointed by the government to investigate its legality. The membership of this committee includes a representative from labor, one from capital, and one from the government. If the strike is declared legal, the government polices the plant and enforces the strike until a settlement is reached. If it is declared illegal, the government orders the laborers back to work.

6. Hubert Herring, *Good Neighbors—Argentina, Brazil, Chile, and Seventeen Other Countries* (New Haven, 1941), p. 318.

flationary tendencies growing out of World War II have temporarily wiped out some of these gains, but there is some evidence that the price level is now becoming stabilized. Recent inflation has seriously affected the plight of the unskilled and the white collar workers. According to the indices compiled by Tempo, the price of food in Mexico increased 327 per cent from 1933 to December, 1946, wearing apparel increased 483 per cent during the same period. There has been no such increase in wages. Bringing the purchasing power of the worker into reasonable balance with prices is a task of the near and immediate future.

munities in Mexico that offer more than four grades. The problem of obtaining competent teachers for the rural schools is serious. Salaries are so low that competent individuals can find more remunerative employment elsewhere, and the rural communities are so isolated that persons with training and experience prefer to live in the cities. The tremendous educational problem is illustrated not only by the extent of illiteracy but also by the fact that the majority of the pupils enrolled in the elementary rural schools are in the first grade. Many never go beyond the first grade, and much of what little they learn is quickly forgotten when they leave school. One out of every seven persons in Mexico speaks an Indian language, and one out of fourteen speaks nothing but Indian languages; hence in many areas the rural teacher must devote most of his time to teaching Spanish (the official language of the country), with the result that there is little time left to teach any other subject.

The task of education is complicated by the rapidly increasing population. Not only are the people confronted with the task of providing for past deficiencies; they are constantly faced with new needs created by the expanding population. Institutions that might have been reasonably adequate for Mexico's population of 1910, or even of 1930, are entirely inadequate for 1948.

The death rate in Mexico has been one of the highest in the Western Hemisphere, although it is now slowly and steadily declining. This is also true of infant mortality. Routine preventive measures, such as vaccination against smallpox and inoculations against outbreaks of epidemics, are now widespread; but anything approaching adequate medical care is still confined to the large cities and to a few favored localities in the rural districts. With the assistance and guidance of the federal government some of the more successful ejidos have group medical programs that appear to be reasonably adequate. A few ejidos are able to offer unlimited consultation, medical treatment, hospitalization, surgical operations, and even obstetrical service to all their members. Regional hospitals are being constructed, and these will greatly extend the available facilities. The need is so great in comparison to the existing facilities, however, that the vast majority of the ejidatarios probably never see a physician.

One of the greatest sources of ill health in Mexico today, as has been true for ages, is polluted drinking water. Pure drinking water is simply unavailable in most rural communities. The Mexican government has recently initiated projects for providing drinking water in some areas, but the need is so widespread that it is likely to require

generations to meet it fully. Another serious problem affecting health is lack of sanitation. Latrines are unknown in the rural districts. Animals are usually kept near the living quarters, and rural people generally do not realize that there is any connection between the house fly and disease.

There has been very little improvement in housing in the rural districts. In many cases the ejidatarios are living in the same shacks they occupied as peons. This is true even on some of the more successful ejidos, where commercial agriculture is carried on, as in Lombardía and Nueva Italia, Los Mochis, Mexicali, and the Laguna region. The Ejido Bank and other agencies have undertaken a few projects to demonstrate the advantages of better housing, but these are not widely copied, and the ejidatarios do not appear to be conscious of the need for better housing. It probably will require a comprehensive program of demonstration designed to change the customs and attitudes of the people with reference to housing before they will put forth the extra effort to achieve the advantages in health and convenience which improved housing might offer.

Perhaps the crucial test of the success of the Revolution is the amount of personal freedom enjoyed by the population today in comparison with that enjoyed previously. Wherever the author traveled in rural Mexico, he made it a point to ask the ejidatarios if they really felt they were better off now than they had been under the hacienda system and if they did not think it might be wise to do away with the ejidos and return to the previous system. Almost invariably they answered: "Bad as conditions are now, we are much better off than before, and we certainly do not wish to return to the hacienda system." Everywhere they reported that they are enjoying personal freedom that was nonexistent previously. They might be living in the same shacks, subsisting on the same type of diet (with, perhaps, some improvement in quantity), wearing the same types of clothes, and drinking the same polluted water; but at least they are not abused by the landlord or kept in perpetual debt slavery, or hunted down by the *rurales* if they try to escape. They are not required to purchase their food and clothing through the *tienda de raya*. There is now no fear of arbitrary arrest and punishment without trial; *ley fuga* is no longer the dreaded fate of those who incur the displeasure of government officials.

Although there are still a number of serious obstacles to the effective functioning of democratic government in Mexico, some of these are gradually disappearing, and others are showing signs of giving

way under the pressure of public opinion. There is hope for the future in the fact that Mexico tolerates freedom of speech⁸ and freedom of the press. Mexicans are becoming increasingly tolerant of the opinions of one another. This was evident in September, 1942, when President Avila Camacho invited all living ex-presidents of Mexico to join with him in celebrating Independence Day as a symbol of national unification (see Pl. XXIII). Six ex-presidents appeared on the same platform together, even though previously some of them had been banished from the country by others.⁹ Recent Mexican presidents have consistently stepped out of office quietly at the end of their six-year terms and have handed the reins of government over to their successors. The policy of encouraging freedom of speech gives the opposition a chance to air its grievances, and it gives men who have faith in the ideals of the Revolution but who do not agree with the specific programs or with the methods being used, opportunity to point out discrepancies between ideals and practice. With gradual improvement in the techniques of communication, this policy should permit the issues to be placed before a greater proportion of the inhabitants so that they may participate in the formation of public opinion. It is difficult to see how such policy could fail to result gradually and ultimately in more democratic institutions.

The personal freedom enjoyed by the general population is probably the greatest achievement of the Mexican Revolution. In the long run, this may prove important enough to counterbalance whatever mistakes may have been made.

8. Freedom of speech is generally enjoyed except by members of the clergy, who are prohibited by law from expressing themselves on political questions.

9. For example, Adolfo de la Huerta had opposed the rise of Calles to the presidency and had had to flee to the United States; Calles had maneuvered the resignation of Ortiz Rubio as president and had supported Abelardo Rodríguez in his place; Cárdenas had banished Calles from the country, and the latter was living in exile in the United States until invited by Avila Camacho to return.

APPENDIXES

Statistical Tables

TABLE 1

UTILIZATION OF LAND IN MEXICO, 1940, BY REGIONS AND STATES*
(In Thousands of Hectares)

Region and State	Total Land Area	Total Crop Land	Pasture Land	Forest Land	Other Productive Nonculti- vated	All Other
North Pacific.	41,245	1,147	7,974	3,006	145	28,973
Baja California N	7,163	188	530	172	2	6,271
Baja California S	7,246	13	912	301	13	6,007
Nayarit	2,732	226	572	542	50	1,342
Sinaloa	5,349	451	1,224	863	40	3,271
Sonora	18,255	269	4,736	1,128	40	12,082
North	80,032	3,563	38,302	18,692	4,109	15,366
Coahuila	15,040	498	10,646	1,332	1,861	703
Chihuahua	24,561	605	12,750	3,951	105	7,150
Durango	12,352	621	4,952	3,686	394	2,699
Nuevo León	6,510	346	2,336	2,464	478	886
San Luis Potosí	6,324	491	2,417	1,576	447	1,393
Tamaulipas	7,960	324	1,693	4,435	177	1,331
Zacatecas	7,285	678	3,508	1,248	647	1,204
Central	27,606	5,427	6,433	3,981	305	11,460
Aguascalientes	647	114	218	27	9	279
Distrito Federal	148	52	11	26	1	58
Guanajuato	3,058	874	841	236	35	1,072
Hidalgo...	2,087	446	371	198	17	1,055
Jalisco....	8,068	1,220	2,206	1,163	58	3,421
México	2,141	539	478	494	41	589
Michoacán	6,009	883	1,110	1,246	61	2,709
Morelos..	497	108	172	71	3	143
Puebla	3,400	800	653	399	58	1,490
Querétaro	1,148	219	330	92	11	496
Tlaxcala	403	172	43	29	11	148
Gulf...	23,753	2,565	2,379	6,618	4,126	8,065
Campeche..	5,095	281	341	2,076	1,408	989
Quintana Roo	5,084	68	27	285	2,396	2,303
Tabasco	2,534	336	352	783	52	1,011
Veracruz...	7,189	1,101	1,577	2,255	62	2,194
Yucatán.	3,851	779	82	1,219	208	1,563
South Pacific	23,829	2,172	3,097	6,361	220	11,979
Colima.	521	103	108	142	5	163
Chiapas	7,441	666	1,234	1,635	44	3,862
Guerrero	6,446	683	801	3,477	33	1,452
Oaxaca	9,421	720	954	1,107	138	6,502
Total....	196,465	14,874	58,185	38,658	8,905	75,843

* Preliminary data from Dirección General de Estadística.

TABLE 1A
LAND UTILIZATION IN MEXICO, 1940, BY REGIONS AND STATES*
(Percentage Distribution)

REGION AND STATE	TOTAL LAND AREA		PERCENTAGE OF TOTAL LAND AREA DEVOTED TO:				
	Thousands of Hectares	Per Cent	Crop Land	Pasture	Forest	Other Productive Noncultivated	All Other
North Pacific.....	41,245	100	2.8	19.8	7.3	0.4	70.2
Baja California N..	7,163	100	2.6	7.4	2.4	.....	87.5
Baja California S..	7,246	100	0.2	12.6	4.2	0.2	82.9
Nayarit.....	2,782	100	8.3	20.9	19.8	1.8	49.1
Sinaloa.....	5,849	100	7.7	20.9	14.8	0.7	55.9
Sonora.....	18,255	100	1.5	25.9	6.2	0.2	66.2
North.....	80,032	100	4.5	47.9	23.4	5.1	19.2
Coahuila.....	15,040	100	3.3	70.8	8.9	12.4	4.7
Chihuahua.....	24,561	100	2.5	51.9	16.1	4.3	29.1
Durango.....	12,352	100	5.0	40.1	22.8	3.2	21.9
Nuevo León.....	6,510	100	5.3	35.9	37.8	7.3	13.6
San Luis Potosí.....	6,324	100	7.8	38.2	24.9	7.1	22.0
Tamaulipas.....	7,960	100	4.1	21.3	55.7	2.2	16.7
Zacatecas.....	7,285	100	9.3	48.2	17.1	8.9	16.5
Central.....	27,605	100	19.7	23.3	14.4	1.1	41.5
Aguascalientes.....	647	100	17.6	33.7	4.2	1.4	45.1
Distrito Federal...	148	100	35.1	7.4	17.6	0.7	39.2
Guanajuato.....	3,058	100	23.6	27.5	7.7	1.1	35.1
Hidalgo.....	2,057	100	21.4	17.8	9.5	0.8	50.6
Jalisco.....	8,068	100	15.1	27.8	14.4	0.7	42.4
México.....	2,141	100	25.2	22.3	23.1	1.9	27.5
Michoacán.....	6,009	100	14.7	18.5	20.7	1.0	45.1
Morelos.....	497	100	21.7	34.6	14.3	0.6	28.8
Puebla.....	3,400	100	23.5	19.2	11.7	1.7	43.8
Querétaro.....	1,148	100	19.1	23.7	8.0	1.0	43.2
Tlaxcala.....	403	100	42.7	10.7	7.2	2.7	36.7
Gulf.....	23,758	100	10.8	10.0	27.9	17.4	34.0
Campeche.....	5,035	100	5.5	6.7	40.7	27.6	19.4
Quintana Roo.....	5,084	100	1.3	0.5	5.6	47.1	45.4
Tabasco.....	2,534	100	13.3	13.9	50.9	2.1	39.9
Veracruz.....	7,189	100	15.3	21.9	31.4	0.9	30.5
Yucatán.....	3,851	100	20.2	2.1	31.7	5.4	40.6
South Pacific.....	28,829	100	9.1	13.0	26.7	0.9	50.3
Colima.....	521	100	19.8	20.7	27.3	1.0	31.3
Chiapas.....	7,441	100	9.0	16.6	22.0	0.6	51.9
Guerrero.....	6,446	100	10.6	12.4	53.9	0.5	22.5
Oaxaca.....	9,421	100	7.6	10.1	11.8	1.5	69.0
Total.....	196,465	100	7.6	29.6	19.7	4.5	38.6

* Preliminary data compiled from Dirección General de Estadística.

TABLE 2

TOTAL CROP LAND OF MEXICO, CLASSIFIED ACCORDING TO THE PRO-
PORTION THAT IS IRRIGATED, HUMID, AND SEASONAL
BY REGIONS AND STATES*

REGION AND STATE	TOTAL CROP LAND		PERCENTAGE OF TOTAL CROP LAND		
	No. of Hectares	Per Cent	Irri- gated	Humid	Seasonal
North Pacific.....	1,147,175	100	35.4	6.7	57.9
Baja California N.....	187,719	100	78.9	0.4	20.7
Baja California S.....	12,730	100	36.0	13.0	51.0
Nayarit.....	226,354	100	3.8	22.6	73.6
Sinaloa.....	450,827	100	20.7	2.9	76.5
Sonora.....	269,545	100	56.4	3.6	40.0
North.....	3,562,634	100	19.6	2.4	78.0
Coahuila.....	498,340	100	49.0	3.4	47.6
Chihuahua.....	604,598	100	22.5	3.2	74.3
Durango.....	621,001	100	18.8	2.2	79.0
Nuevo León.....	345,622	100	28.6	0.7	70.7
San Luis Potosí.....	491,289	100	5.3	4.8	89.9
Tamaulipas.....	324,349	100	16.4	1.6	82.0
Zacatecas.....	677,435	100	3.4	0.6	95.9
Central.....	5,426,964	100	13.0	3.3	83.7
Aguascalientes.....	114,276	100	17.0	0.7	82.2
Distrito Federal.....	51,901	100	8.3	7.0	84.7
Guanajuato.....	874,392	100	16.2	3.3	80.5
Hidalgo.....	446,309	100	11.1	2.2	86.7
Jalisco.....	1,220,238	100	9.4	3.5	87.1
México.....	538,615	100	13.9	3.1	83.0
Michoacán.....	882,863	100	20.5	4.7	74.8
Morelos.....	107,661	100	25.7	1.7	72.5
Puebla.....	800,238	100	7.7	3.5	88.8
Querétaro.....	218,868	100	11.7	2.0	86.3
Tlaxcala.....	171,603	100	3.5	1.6	94.9
Gulf.....	2,564,698	100	0.7	17.3	82.1
Campeche.....	281,374	100	0.1	21.2	78.7
Quintana Roo.....	67,585	100	.....	4.7	95.3
Tabasco.....	336,533	100	0.8	58.3	40.9
Veracruz.....	1,100,624	100	1.2	16.5	82.3
Yucatán.....	778,582	100	0.1	0.2	99.6
South Pacific.....	2,172,513	100	3.4	8.3	88.3
Colima.....	103,452	100	11.5	4.2	84.2
Chiapas.....	666,155	100	1.9	10.6	87.5
Guerrero.....	682,797	100	2.3	4.1	93.6
Oaxaca.....	720,109	100	4.7	10.6	84.6
Total.....	14,873,984	100	12.8	6.5	80.7

* Preliminary data compiled from *Segundo censo ejidal* and from *Segundo censo agrícola-ganadero* (1940).

TABLE 3
APPROXIMATE NUMBER OF INHABITANTS, LAND AREA, AND DENSITY
OF POPULATION IN 21 REPUBLICS OF THE WESTERN HEMISPHERE*
(1940 or 1941. Arranged in order of Number of Inhabitants)

Country	Date	No. of Inhabitants†	Area (Square Miles)	No. Per- sons per Square Mile
United States‡	1940	131,669,275	2,977,128	44.2
Brazil	1940	41,565,083	3,286,170	12.6
Mexico	1940	19,653,552	758,258	25.9
Argentina	1941	13,517,135	1,073,698	12.6
Colombia	1941	9,387,930	439,828	21.3
Peru	1940	7,023,111	482,258	14.6
Chile	1940	5,023,539	286,396	17.5
Cuba	1941	4,232,000	44,218	95.7
Venezuela	1941	3,951,371	352,150	11.2
Bolivia	1941	3,495,450	416,040	8.4
Guatemala	1940	3,283,209	42,364	77.5
Ecuador	1941	3,085,871	103,415	29.8
Haiti	1939	2,600,000	10,700	243.0
Uruguay	1941	2,185,626	72,172	30.3
El Salvador	1941	1,829,816	13,176	138.9
Dominican Republic	1941	1,768,163	19,332	91.5
Honduras	1940	1,107,859	59,161	18.7
Paraguay	1941	1,040,420	150,515	6.9
Nicaragua	1941	929,000	53,668	17.3
Costa Rica	1940	656,129	19,238	34.1
Panama	1940	631,637	28,575	22.1

* Data adapted partly from *Inter-American Affairs*, 1942, ed. Arthur P. Whitaker (New York, 1943), Appen., Table 1; and partly from material in "World Population in Transition," ed. Kingsley Davis, *Annals of the American Academy of Political and Social Science*, January, 1945, pp. 22, 23.

† Data for the following countries are based on official census: United States, Brazil, Mexico, Peru, Chile, Venezuela, Guatemala, Honduras, and Panama. Data for all other countries are official estimates.

‡ Continental. Area applies only to land area.

TABLE 4

NUMBER AND PERCENTAGE OF MEXICO'S INHABITANTS LIVING IN COMMUNITIES OF VARYING SIZE, BY REGIONS AND STATES*

REGION AND STATE	TOTAL POPULATION		PER CENT OF TOTAL INHABITANTS (By Size of Community)			
	No.	Per Cent	2,500 or Less	2,501- 5,000	5,001- 10,000	Over 10,000
North Pacific.....	1,204,073	100	70.9	6.9	5.0	17.2
Baja California N....	78,907	100	49.5	5.8	.....	44.7
Baja California S....	51,471	100	64.2	5.0	10.6	20.2
Nayarit.....	216,698	100	69.8	7.7	9.6	12.9
Sinaloa.....	492,821	100	78.2	4.3	3.9	13.6
Sonora.....	364,176	100	67.3	10.3	4.0	18.4
North.....	3,902,685	100	64.6	6.1	5.9	23.4
Coahuila.....	550,717	100	49.4	4.5	10.2	35.9
Chihuahua.....	623,944	100	63.3	6.4	5.5	24.8
Durango.....	483,829	100	75.9	8.7	3.2	12.2
Nuevo León.....	541,147	100	56.1	4.4	5.1	34.4
San Luis Potosí.....	678,779	100	74.7	5.3	6.2	13.8
Tamaulipas.....	458,832	100	54.5	1.0	6.4	38.1
Zacatecas.....	565,437	100	75.3	12.1	4.4	8.2
Central.....	9,430,009	100	58.0	7.9	6.0	28.1
Aguascalientes.....	161,693	100	42.6	6.5	.....	50.9
Distrito Federal...	1,757,530	100	6.2	2.1	3.3	88.4
Guanajuato.....	1,046,490	100	64.9	4.6	8.4	22.1
Hidalgo.....	771,818	100	81.8	6.5	1.4	10.3
Jalisco.....	1,418,310	100	58.8	8.4	9.7	23.1
México.....	1,146,034	100	77.3	13.2	5.7	3.8
Michoacán.....	1,182,003	100	71.1	11.0	8.2	9.7
Morelos.....	182,711	100	72.1	16.5	3.5	7.9
Puebla.....	1,294,620	100	72.2	9.6	4.9	13.3
Querétaro.....	244,737	100	80.7	2.8	2.7	13.8
Tlaxcala.....	224,063	100	70.4	16.8	12.8	.....
Gulf.....	2,432,390	100	68.3	8.9	5.8	17.0
Campeche.....	90,460	100	50.4	15.4	8.5	25.7
Quintana Roo.....	18,752	100	75.1	24.9	.....	.....
Tabasco.....	285,630	100	82.0	6.6	2.6	8.8
Veracruz.....	1,619,338	100	71.2	8.3	4.8	15.7
Yucatán.....	418,210	100	51.3	10.5	11.7	26.5
South Pacific.....	2,684,395	100	83.8	7.6	4.0	4.6
Colima.....	78,806	100	54.9	7.8	8.7	28.6
Chiapas.....	679,885	100	83.9	4.2	5.6	6.3
Guerrero.....	732,910	100	85.4	7.9	4.9	1.8
Oaxaca.....	1,192,794	100	84.7	9.5	2.1	3.7
Total.....	19,653,552	100	64.9	7.6	5.6	21.9

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

TABLE 5
NUMBER AND PERCENTAGE OF THE ECONOMICALLY ACTIVE POPULATION OF
MEXICO ENGAGED IN AGRICULTURE, BY SIZE OF COMMUNITY
AND BY REGIONS AND STATES*

REGION AND STATE	PERSONS ENGAGED IN AGRICULTURE					
	Total Mexico		Size of Community			
			Over 10,000 Inhabitants		10,000 or Less Inhabitants	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
North Pacific.....	239,354	65.9	9,590	15.6	229,764	76.2
Baja California N....	13,544	53.5	1,811	17.1	11,733	79.8
Baja California S....	7,533	50.1	387	13.9	7,146	58.4
Nayarit.....	50,242	73.4	2,770	32.4	47,472	79.8
Sinaloa.....	106,565	70.8	2,543	12.2	104,022	80.3
Sonora.....	61,470	59.2	2,079	11.0	59,391	69.8
North.....	730,589	65.2	25,173	9.7	705,416	81.9
Coahuila.....	86,727	54.8	9,140	16.2	77,587	76.1
Chihuahua.....	111,659	63.0	4,467	10.2	107,192	80.4
Durango.....	106,030	76.8	2,613	16.0	103,417	84.9
Nuevo León.....	89,995	54.8	1,571	2.9	88,424	80.4
San Luis Potosí....	139,209	72.5	1,553	6.0	137,656	83.0
Tamaulipas.....	74,775	55.5	4,528	9.0	70,247	83.5
Zacatecas.....	122,194	77.8	1,301	10.3	120,893	83.7
Central.....	1,700,947	58.8	53,630	6.1	1,647,317	82.0
Aguascalientes....	22,523	50.8	1,894	9.0	20,629	88.8
Distrito Federal....	38,322	6.3	9,947	1.8	28,375	46.2
Guanajuato.....	219,445	71.4	12,832	18.9	206,613	86.3
Hidalgo.....	174,884	76.3	951	4.1	173,933	84.6
Jalisco.....	281,230	64.4	15,989	14.7	265,241	80.8
México.....	263,898	78.6	594	4.2	263,304	81.8
Michoacán.....	261,563	75.8	7,369	21.0	254,194	82.0
Morelos.....	42,064	77.3	409	9.2	41,655	83.3
Puebla.....	288,543	74.1	2,514	4.8	286,029	84.8
Querétaro.....	57,091	76.5	1,131	11.0	55,960	86.9
Tlaxcala.....	51,384	76.5	.....	.....	51,384	76.5
Gulf.....	507,093	71.4	14,973	12.0	492,120	84.0
Campeche.....	17,205	62.4	1,740	25.0	15,465	75.1
Quintana Roo.....	4,745	70.7	.....	.....	4,745	70.7
Tabasco.....	62,099	80.7	1,276	18.9	60,823	86.6
Veracruz.....	333,946	72.0	9,276	12.1	324,670	83.9
Yucatán.....	89,098	66.0	2,681	7.9	86,417	85.7
South Pacific.....	652,909	85.0	9,251	25.1	643,658	87.9
Colima.....	15,381	60.6	1,726	23.6	13,655	75.6
Chiapas.....	171,257	85.8	2,567	20.6	168,690	90.1
Guerrero.....	176,178	87.4	1,356	38.1	174,822	88.3
Oaxaca.....	290,093	84.7	3,602	26.6	286,491	87.1
Total.....	3,830,892	65.4	112,617	8.2	3,718,275	82.8

* Data compiled from *Sexto censo de población (1940)* (Dirección General de Estadística).

INCREASE IN POPULATION FROM 1930 TO 1940 OF LOCALITIES WHICH IN 1930 HAD
OVER 10,000 INHABITANTS, COMPARED WITH THAT OF LOCALITIES WHICH
IN 1940 HAD 10,000 OR LESS INHABITANTS, BY REGIONS AND STATES*

REGION AND STATE	LOCALITIES OF OVER 10,000 INHABITANTS IN 1940			LOCALITIES OF 10,000 OR LESS INHABITANTS IN 1940		
	No. of Inhabitants in 1940	No. of Inhabitants in 1930	Per Cent In- crease† 1930- 40	No. of Inhabitants in 1940	No. of Inhabitants in 1930	Per Cent In- crease 1930- 40
North Pacific.....	207,582	176,191	17.8	996,491	798,838	24.7
Baja California N.	35,261	23,226	51.8	43,646	25,101	73.9
Baja California S.	10,401	8,166	27.4	41,070	38,923	5.5
Nayarit.....	27,862	22,638	23.1	188,836	145,086	30.2
Sinaloa.....	67,079	57,586	16.5	425,742	338,032	25.9
Sonora.....	66,979	64,575	3.7	297,197	251,696	18.1
North.....	912,201	736,577	23.8	2,990,484	2,396,412	24.8
Coahuila.....	197,708	162,425	21.7	353,009	274,000	28.8
Chihuahua.....	154,628	119,519	29.4	469,316	372,273	26.1
Durango.....	58,970	60,372	- 2.3	424,859	343,992	23.5
Nuevo León.....	186,092	132,577	40.4	355,055	284,914	24.6
San Luis Potosí...	93,709	87,798	6.7	585,070	492,033	18.9
Tamaulipas.....	174,634	138,898	25.7	284,198	205,141	38.5
Zacatecas.....	46,460	34,988	32.8	518,977	424,059	22.4
Central.....	2,651,905	2,010,534	31.9	6,778,104	6,033,363	12.3
Aguascalientes...	82,234	62,244	32.1	79,459	70,656	12.5
Distrito Federal..	1,554,377	1,085,261	43.2	203,153	144,315	40.8
Guanajuato.....	231,038	216,504	6.7	815,452	771,297	5.7
Hidalgo.....	79,442	63,839	24.4	692,376	613,933	12.8
Jalisco.....	327,015	262,336	24.7	1,091,295	993,010	9.9
México.....	43,429	41,234	5.3	1,102,605	948,878	16.2
Michoacán.....	114,602	100,516	14.0	1,067,401	947,865	12.6
Morelos.....	14,336	8,654	67.6	168,375	123,514	36.3
Puebla.....	171,803	137,461	25.0	1,122,817	1,012,964	10.8
Querétaro.....	33,629	32,585	3.2	211,108	201,473	4.8
Tlaxcala.....				224,083	205,458	9.1
Gulf.....	414,501	366,863	13.0	2,017,889	1,715,799	17.6
Campeche.....	23,277	20,125	15.7	67,183	64,505	4.2
Quintana Roo.....				18,752	10,620	76.6
Tabasco.....	25,114	15,395	63.1	260,516	208,628	24.9
Veracruz.....	255,268	224,847	13.5	1,364,070	1,152,446	18.4
Yucatán.....	110,842	106,496	4.1	307,368	279,600	9.9
South Pacific.....	122,051	126,439	- 3.5	2,562,344	2,191,706	16.9
Colima.....	22,601	21,117	7.0	56,205	40,806	37.7
Chiapas.....	42,838	45,350	- 5.5	637,047	484,633	31.4
Guerrero.....	12,756	12,008	6.2	720,154	629,682	14.4
Oaxaca.....	43,856	47,964	- 8.6	1,148,938	1,036,585	10.8
Total.....	4,308,240	3,416,604	26.1	15,345,312	13,136,118	16.8

* Data compiled from *Quinto censo de población* and *Sexto censo de población* (1930 and 1940) (Dirección General de Estadística).

† Decrease is indicated by a minus sign.

TABLE 7

NUMBER OF PERSONS AND PERCENTAGE OF TOTAL POPULATION IN MEXICO
FIVE YEARS OF AGE AND OVER, SPEAKING INDIAN LAN-
GUAGES, BY REGIONS AND STATES*

REGION AND STATE	POPULATION FIVE YEARS OF AGE AND OVER						
	Total No. of Persons	All Persons Speaking Indian Languages		Persons Speaking Indian Languages and Spanish		Persons Speaking Indian Languages Exclusively	
		No.	Per Cent of Total	No.	Per Cent of Total	No.	Per Cent of Total
North Pacific.....	1,029,269	41,504	4.0	31,695	3.1	9,809	1.0
Baja California N..	68,233	302	0.4	302	0.4	.....	.....
Baja California S..	44,160	8	.....	8	.....	.....	.....
Nayarit.....	186,278	5,513	3.0	3,060	1.6	2,453	1.3
Sinaloa.....	417,396	9,327	2.2	7,965	1.9	1,362	0.3
Sonora.....	313,202	26,354	8.4	20,360	6.5	5,994	1.9
North.....	3,312,891	111,030	3.4	47,955	1.4	63,075	1.9
Coahuila.....	469,961	422	0.1	422	0.1	.....	.....
Chihuahua.....	528,116	26,630	5.0	14,326	2.7	12,304	2.3
Durango.....	408,541	1,823	0.4	1,639	0.4	184	.....
Nuevo León.....	463,000	46	.....	46	.....	.....	.....
San Luis Potosí...	572,518	81,771	14.3	31,185	5.4	50,586	8.8
Tamaulipas.....	393,630	306	0.1	306	0.1	.....	.....
Zacatecas.....	477,125	32	.....	31	.....	1	.....
Central.....	8,109,247	891,926	11.0	499,881	6.2	392,045	4.8
Aguascalientes....	140,645	33	.....	33	.....	.....	.....
Distrito Federal...	1,548,145	17,967	1.2	17,955	1.2	12	.....
Guanajuato.....	896,387	6,460	0.7	5,619	0.6	841	0.1
Hidalgo.....	652,792	218,312	33.4	96,940	14.9	121,372	18.6
Jalisco.....	1,225,444	1,331	0.1	1,260	0.1	121	.....
México.....	976,047	203,783	20.9	135,931	13.9	67,852	7.0
Michoacán.....	1,008,026	62,141	6.2	38,580	3.8	23,561	2.3
Morelos.....	157,173	15,448	9.8	12,377	7.9	3,071	2.0
Puebla.....	1,104,877	323,089	29.2	159,473	14.4	163,616	14.8
Querétaro.....	209,352	16,587	7.9	12,307	5.9	4,280	2.0
Tlaxcala.....	190,359	26,725	14.0	19,406	10.2	7,319	3.8
Gulf.....	2,062,204	577,197	28.0	335,093	16.2	242,104	11.7
Campeche.....	77,856	32,622	41.9	19,936	25.6	12,686	16.3
Quintana Roo....	15,671	6,722	42.9	4,116	26.3	2,606	16.6
Tabasco.....	234,608	24,820	10.6	21,830	9.3	2,990	1.3
Veracruz.....	1,374,343	247,048	18.0	121,673	8.9	125,375	9.1
Yucatán.....	359,726	265,985	73.9	167,538	46.6	98,447	27.4
South Pacific.....	2,275,049	869,252	38.2	339,267	14.9	529,985	23.3
Colima.....	68,285	20	.....	20	.....	.....	.....
Chiapas.....	568,147	187,139	32.9	66,404	11.7	120,735	21.3
Guerrero.....	622,231	125,536	20.2	38,363	6.2	87,173	14.0
Oaxaca.....	1,016,386	556,557	54.8	234,480	23.1	322,077	31.7
Total.....	16,788,660	2,490,909	14.8	1,253,891	7.5	1,237,018	7.4

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

TABLE 8

NUMBER AND PER CENT OF PERSONS IN MEXICO, FIVE YEARS OF AGE AND OVER
LIVING IN LOCALITIES HAVING 10,000 OR LESS INHABITANTS, WHO
SPEAK INDIAN LANGUAGES, BY REGIONS AND STATES*

REGION AND STATE	POPULATION FIVE YEARS OF AGE AND OVER						
	Total No. of Persons	All Persons Speaking Indian Languages		Persons Speaking Indian Languages and Spanish		Persons Speaking Indian Languages Exclusively	
		No.	Per Cent of Total	No.	Per Cent of Total	No.	Per Cent of Total
North Pacific.....	847,213	41,010	4.8	31,207	3.7	9,803	1.2
Baja California N..	37,548	268	0.7	268	0.7	.....	.....
Baja California S..	35,114	7	.. ..	7	.. ..	.....	.....
Nayarit..	161,905	5,503	3.4	3,050	1.9	2,453	1.5
Sinaloa.....	358,180	9,285	2.6	7,923	2.2	1,362	0.4
Sonora ..	254,466	25,947	10.2	19,959	7.8	5,988	2.4
North....	2,515,777	110,652	4.4	47,578	1.9	63,074	2.5
Coahuila..	298,172	362	0.1	362	0.1	.....	.....
Chihuahua..	393,563	26,577	6.8	14,273	3.6	12,304	3.1
Durango...	357,177	1,818	0.5	1,634	0.5	184	0.1
Nuevo León..	299,820	23	.....	23	.....	.....	.....
San Luis Potosí..	490,651	81,754	16.7	31,168	6.4	50,586	10.3
Tamaulipas ..	239,228	100	.....	100	.....	.....	.....
Zacatecas..	437,166	18	.....	18	.....	.....	.....
Central.....	5,769,650	882,485	15.3	490,486	8.5	391,999	6.8
Aguascalientes	67,713	20	.....	20	.....	.....	.....
Distrito Federal	174,209	11,607	6.7	11,598	6.7	9	.....
Guanajuato...	693,997	6,397	0.9	5,560	0.8	837	0.1
Hidalgo ..	583,979	217,743	37.3	96,376	16.5	121,367	20.8
Jalisco..	935,048	1,202	0.1	1,081	0.1	121	.. ..
México.....	937,811	203,441	21.7	135,589	14.5	67,852	7.2
Michoacán..	907,061	61,764	6.8	38,203	4.2	23,561	2.6
Morelos	144,568	15,402	10.7	12,331	8.5	3,071	2.1
Puebla ..	954,561	321,641	33.7	158,058	16.6	163,583	17.1
Querétaro ..	179,744	16,543	9.2	12,264	6.8	4,279	2.4
Tlaxcala ..	190,359	26,725	14.0	19,406	10.2	7,319	3.8
Gulf	1,695,933	551,197	32.5	309,296	18.2	241,901	14.3
Campeche ..	57,509	30,878	53.7	18,202	31.7	12,676	22.0
Quintana Roo ..	15,671	6,722	42.9	4,116	26.3	2,606	16.6
Tabasco..	212,630	24,738	11.6	21,748	10.2	2,990	1.4
Veracruz ..	1,148,246	243,984	21.2	118,643	10.3	125,341	10.9
Yucatán...	261,877	244,875	93.5	146,587	56.0	98,288	37.5
South Pacific..	2,167,608	855,247	39.5	332,478	15.3	522,769	24.1
Colima ..	48,205	16	.....	16	.....	.....	.....
Chiapas ..	530,684	186,424	35.1	65,710	12.4	120,714	22.7
Guerrero ..	611,105	125,520	20.5	38,347	6.3	87,173	14.3
Oaxaca ..	977,614	543,287	55.6	228,405	23.4	314,882	32.2
Total	12,996,181	2,440,591	18.7	1,211,045	9.3	1,229,546	9.5

* Data from *Sexto censo de población (1940)* (Dirección General de Estadística).

TABLE 9
PERCENTAGE OF MEXICO'S POPULATION, FOREIGN-BORN AND
NATIVE-BORN, BY REGIONS AND STATES*

REGION AND STATE	TOTAL POPULATION	PERCENTAGE FOREIGN-BORN	PERCENTAGE NATIVE-BORN		
			Total	Born in State of Residence	Born in Other States
North Pacific.....	100	1.6	98.5	86.7	11.8
Baja California N..	100	12.3	87.7	39.6	48.1
Baja California S..	100	0.4	99.5	95.1	4.4
Nayarit.....	100	0.2	99.8	84.4	15.4
Sinaloa.....	100	0.4	99.6	93.2	6.4
Sonora.....	100	1.7	98.3	88.2	10.1
North.....	100	1.8	98.2	84.9	13.3
Coahuila.....	100	2.0	98.1	76.4	21.7
Chihuahua.....	100	3.6	96.4	85.1	11.3
Durango.....	100	0.9	99.2	88.1	11.1
Nuevo León.....	100	1.9	98.1	83.4	14.7
San Luis Potosí...	100	0.4	99.7	92.6	7.1
Tamaulipas.....	100	3.6	96.3	72.4	23.9
Zacatecas.....	100	0.6	99.4	92.8	6.6
Central.....	100	0.7	99.3	86.7	12.6
Aguascalientes...	100	0.9	99.1	80.8	18.3
Distrito Federal...	100	2.7	97.3	50.6	46.7
Guanajuato.....	100	0.3	99.7	95.9	3.8
Hidalgo.....	100	0.1	99.9	95.5	4.4
Jalisco.....	100	0.4	99.6	95.1	4.5
México.....	100	0.1	99.9	96.4	3.5
Michoacán.....	100	0.2	99.7	96.0	3.7
Morelos.....	100	0.3	99.7	79.0	20.7
Puebla.....	100	0.2	99.9	95.4	4.5
Querétaro.....	100	0.1	99.9	94.5	5.4
Tlaxcala.....	100	0.1	99.9	94.7	5.2
Gulf.....	100	0.5	99.5	92.8	6.7
Campeche.....	100	0.4	99.6	92.5	7.1
Quintana Roo....	100	13.7	86.3	60.2	26.1
Tabasco.....	100	0.2	99.9	96.6	3.3
Veracruz.....	100	0.4	99.7	91.3	8.4
Yucatán.....	100	0.5	99.5	97.7	1.8
South Pacific.....	100	0.4	99.6	97.2	2.4
Colima.....	100	0.3	99.8	77.0	22.8
Chiapas.....	100	1.4	98.6	96.6	2.0
Guerrero.....	100	0.1	99.9	97.9	2.0
Oaxaca.....	100	0.1	100.0	98.4	1.6
Total.....	100	0.9	99.1	88.5	10.6

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

TABLE 10
POPULATION OF MEXICO HAVING FOREIGN CITIZENSHIP, CLASSIFIED
ACCORDING TO NATIONALITY AND SIZE OF COMMUNITY*

NATIONALITY	TOTAL POPULATION		POPULATION LIVING IN LOCALITIES OF OVER 10,000 INHABITANTS		POPULATION LIVING IN LOCALITIES OF 10,000 OR LESS INHABITANTS	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Nationalities of the Americas						
United States.....	9,585	100	7,029	73.3	2,556	26.7
Canadian.....	5,338	100	77	1.4	5,261	98.6
Guatemalan.....	3,358	100	478	14.2	2,880	85.8
Cuban.....	1,123	100	978	87.1	145	12.9
Others of the Americas...	1,626	100	1,341	82.5	285	17.5
Nationalities of Europe						
Spanish.....	21,022	100	18,203	86.6	2,819	13.4
British.....	2,087	100	907	30.4	2,080	69.6
German.....	2,852	100	2,239	78.5	613	21.5
French.....	1,801	100	1,594	88.5	207	11.5
Polish.....	1,552	100	1,503	96.8	49	3.2
Italian.....	1,183	100	841	71.1	342	28.9
Others of Europe.....	3,390	100	3,018	88.8	381	11.2
Nationalities of Asia						
Chinese.....	4,856	100	3,042	62.6	1,814	37.4
Syrian and Lebanese.....	3,495	100	2,760	79.0	735	21.0
Japanese.....	1,550	100	857	55.3	693	44.7
All others.....	1,757	100	1,402	79.8	355	20.2
Unknown.....	64	100	60	93.8	4	6.2
Total.....	67,548	100	46,329	68.6	21,219	31.4

* Data compiled from *Sexto censo de población* (1930) (Dirección General de Estadística).

TABLE 11
INHABITANTS OF MEXICO, CLASSIFIED ACCORDING TO AGE AND SEX*

Age Groups	TOTAL POPULATION		MALE		FEMALE	
	No. of Persons	Per Cent	No. of Persons	Per Cent	No. of Persons	Per Cent
Total . . .	19,653,552	100.0	9,695,787	49.3	9,957,765	50.7
Ages unknown	4,734	.....	2,670	.....	2,064	.....
All of known ages	19,648,818	100.0	9,693,117	49.3	9,955,701	50.7
Under 5	2,864,802	14.6	1,448,488	7.4	1,416,404	7.2
5-9	2,828,620	14.4	1,441,081	7.3	1,387,439	7.1
10-14	2,402,733	12.2	1,246,803	6.3	1,155,925	5.9
15-19	1,906,301	10.2	969,506	4.9	1,026,795	5.2
20-24	1,547,322	7.9	790,501	3.8	807,821	4.1
25-29	1,591,649	8.1	752,210	3.8	839,439	4.3
30-34	1,318,488	6.7	634,103	3.2	684,385	3.5
35-39	1,371,619	7.0	670,663	3.4	700,956	3.6
40-44	937,305	4.8	449,853	2.3	487,542	2.5
45-49	757,898	3.9	362,664	1.8	395,234	2.0
50-54	601,107	3.1	284,332	1.4	316,775	1.6
55-59	425,091	2.2	205,531	1.0	219,560	1.1
60-64	410,505	2.1	204,753	1.0	214,752	1.1
65-69	226,506	1.2	111,189	0.6	115,317	0.6
70-74	163,035	0.8	78,953	0.4	84,082	0.4
75-79	88,707	0.5	43,006	0.2	44,801	0.2
80-84	62,548	0.3	29,063	0.1	33,485	0.2
85-89	24,648	0.1	11,509	0.1	13,139	0.1
90 and over	20,854	0.1	9,004	.....	11,850	0.1

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

TABLE 12

POPULATION OF MEXICO LIVING IN CITIES WITH OVER 10,000 INHABITANTS
CLASSIFIED ACCORDING TO AGE AND SEX*

AGE GROUPS	TOTAL POPULATION		MALE		FEMALE	
	No. of Persons	Per Cent	No. of Persons	Per Cent	No. of Persons	Per Cent
Total.	4,308,240	100.0	1,992,016	46.2	2,316,224	53.8
Ages unknown...	1,452	.....	840	.....	612	.....
All of known ages	4,306,788	100.0	1,991,176	46.2	2,315,612	53.8
Under 5.	515,761	12.0	260,900	6.1	254,861	5.9
5-9	509,436	11.8	256,099	5.9	253,337	5.9
10-14	486,627	11.3	242,580	5.6	244,047	5.7
15-19	458,037	10.6	204,394	4.7	253,643	5.9
20-24	384,398	8.9	168,851	3.9	215,547	5.0
25-29	386,955	9.0	169,632	3.9	217,323	5.0
30-34	324,659	7.5	148,873	3.5	175,786	4.1
35-39	335,154	7.8	152,658	3.5	182,496	4.2
40-44	234,477	5.4	106,404	2.5	128,073	3.0
45-49	185,698	4.3	81,860	1.9	103,838	2.4
50-54	151,089	3.5	65,263	1.5	85,826	2.0
55-59	105,295	2.4	44,438	1.0	60,857	1.4
60-64	94,183	2.2	38,185	0.9	55,998	1.3
65-69	52,368	1.2	20,562	0.5	31,806	0.7
70-74	37,825	0.9	14,560	0.3	23,265	0.5
75-79	21,286	0.5	8,090	0.2	13,196	0.3
80-84	13,464	0.3	4,706	0.1	8,758	0.2
85-89	5,778	0.1	1,877	. . .	3,901	0.1
90 and over	4,298	0.1	1,244	. . .	3,054	0.1

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

TABLE 13

POPULATION OF MEXICO LIVING IN LOCALITIES WITH 10,000 OR LESS
INHABITANTS, CLASSIFIED ACCORDING TO AGE AND SEX*

AGE GROUPS	TOTAL POPULATION		MALE		FEMALE	
	No. of Persons	Per Cent	No. of Persons	Per Cent	No. of Persons	Per Cent
Total.	15,345,312	100.0	7,703,771	50.2	7,641,541	49.8
Ages unknown. . .	3,282	.....	1,830	.....	1,452	.....
All of known ages	15,342,030	100.0	7,701,941	50.2	7,640,089	49.8
Under 5.	2,349,131	15.3	1,187,588	7.7	1,161,543	7.6
5-9.	2,319,084	15.1	1,184,982	7.7	1,134,102	7.4
10-14.	1,916,106	12.5	1,004,228	6.5	911,878	5.9
15-19.	1,538,264	10.0	765,112	5.0	773,152	5.0
20-24.	1,162,924	7.6	570,650	3.7	592,274	3.9
25-29.	1,204,694	7.9	582,578	3.8	622,116	4.1
30-34.	993,829	6.5	485,230	3.2	508,599	3.3
35-39.	1,036,465	6.8	518,005	3.4	518,460	3.4
40-44.	702,918	4.6	343,449	2.2	359,469	2.3
45-49.	572,200	3.7	280,804	1.8	291,396	1.9
50-54.	450,018	2.9	219,069	1.4	230,949	1.5
55-59.	319,796	2.1	161,093	1.0	158,703	1.0
60-64.	325,322	2.1	166,568	1.1	158,754	1.0
65-69.	174,138	1.1	90,627	0.6	83,511	0.5
70-74.	125,210	0.8	64,393	0.4	60,817	0.4
75-79.	67,421	0.4	35,816	0.2	31,605	0.2
80-84.	49,084	0.3	24,357	0.2	24,727	0.2
85-89.	18,870	0.1	9,632	0.1	9,238	0.1
90 and over. . . .	16,556	0.1	7,760	0.1	8,796	0.1

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

TABLE 14
TYPES OF LAND DISTRIBUTED IN MEXICO UNDER THE AGRARIAN PROGRAM, 1915-16, BY REGIONS*

Type of Land	Regions																	
	Total Mexico			North Pacific			North			Central			Gulf			South Pacific		
	No. of Hectares	Per Cent		No. of Hectares	Per Cent		No. of Hectares	Per Cent		No. of Hectares	Per Cent		No. of Hectares	Per Cent		No. of Hectares	Per Cent	
Crop land	7,892,955	20.3		500,208	20.4		2,060,364	15.1		3,230,345	14.9		1,205,421	30.8		836,557	32.8	
Irrigated	1,328,070	4.4		151,148	5.5		356,992	2.6		573,455	8.0		179,286	4.6		68,089	2.7	
Seasonal	6,563,885	21.9		409,120	14.9		1,703,372	12.5		2,656,890	36.9		1,026,135	26.3		768,468	30.2	
Pasture	13,092,133	43.0		800,930	22.1		8,822,219	64.7		2,329,021	32.4		233,368	6.5		1,080,595	42.4	
Woodland	5,299,192	17.7		919,076	33.4		1,087,202	9.0		891,608	12.4		2,048,225	32.5		353,081	13.9	
All other	3,736,072	12.1		663,076	24.1		1,658,903	12.2		741,529	10.3		396,146	10.1		276,418	10.9	
Total	30,020,352	100.0		2,749,350	100.0		13,628,688	100.0		7,192,503	100.0		3,903,160	100.0		2,546,651	100.0	

* Compiled from the records of the Departamento Agrario.

* Compiled from the records of the Departamento Agrario.

TABLE 15

NUMBER OF COLONIES FORMED AND AMOUNT AND SOURCE OF LAND COLONIZED
IN MEXICO FROM 1916 TO 1943, BY REGIONS AND STATES*

REGION AND STATE	No. OF COLO- NIES	No. OF COLO- NISTS	LAND AREA INVOLVED					
			Total Area		From National Lands		From Private Holdings	
			No. of Hectares	Per Cent	No. of Hectares	Per Cent	No. of Hectares	Per Cent
North Pacific. . .	51	2,709	146,993	100	72,945	49.6	74,048	50.4
Baja Califor- nia N.	44	2,066	86,230	100	51,407	59.6	34,823	40.4
Baja Califor- nia S.								
Nayarit.	1	98	20	100			20	100.0
Sinaloa.	1	46	900	100	900	100.0		
Sonora.	5	499	59,843	100	20,638	34.5	39,205	65.5
North.	78	7,125	862,387	100	346,095	40.1	516,292	59.9
Coahuila. . . .	25	828	136,688	100	126,925	92.9	9,763	7.1
Chihuahua. . .	6	556	132,637	100	25,782	19.4	106,855	80.6
Durango.	21	2,743	274,996	100	36,156	13.1	238,840	86.9
Nuevo León. . .	2	346	16,309	100	14,894	91.3	1,415	8.7
San Luis Potosí	13	1,866	153,445	100			153,445	100.0
Tamaulipas. . .	10	635	142,338	100	142,338	100.0		
Zacatecas. . . .	1	151	5,974	100			5,974	100.0
Central.	32	2,773	147,661	100	12,067	8.2	135,594	91.8
Aguascalientes								
Distrito Fede- ral.								
Guanajuato. . .	2	90	1,025	100	1,025	100.0		
Hidalgo.	7	189	19,501	100	1,457	7.5	18,044	92.5
Jalisco.	3	1,708	105,034	100			105,034	100.0
México.	4	49	2,724	100	2,202	80.8	522	19.2
Michoacán. . . .	6	242	4,517	100	3,410	75.5	1,107	24.5
Morelos.	5	194	1,858	100	1,858	100.0		
Puebla.	3	93	2,115	100	2,115	100.0		
Querétaro. . . .	1	197	10,701	100			10,701	100.0
Tlaxcala.	1	11	186	100			186	100.0
Gulf.	7	202	58,948	100	51,173	86.8	7,775	13.2
Campeche. . . .	1		7,775	100			7,775	100.0
Quintana Roo. .	1		10,000	100	10,000	100.0		
Tabasco.	2	132	4,570	100	4,570	100.0		
Veracruz.	3	70	36,603	100	36,603	100.0		
Yucatán.								
South Pacific. . .	9	937	31,818	100	7,752	24.4	24,066	75.6
Colima.								
Chiapas.	3	284	11,972	100	4,512	37.7	7,460	62.3
Guerrero.	4	220	6,846	100	3,240	47.3	3,606	52.7
Oaxaca.	2	433	13,000	100			13,000	100.0
Total.	177	13,746	1,247,807	100	490,032	39.3	757,775	60.7

* Data compiled from the records of the Departamento de Colonización, Secretaría de Agricultura y Fomento.

TABLE 16

LAND MADE AVAILABLE BY MEANS OF IRRIGATION PROJECTS AND NUMBER OF PERSONS BENEFITED, 1928-44, BY REGION AND STATES*

REGION AND STATE†	TOTAL AREA (HECTARES)	TOTAL NO. OF BENEFICIARIES	AVERAGE NO. OF HECTARES PER BENEFICIARY	IN PRIVATE HOLDINGS		IN PUBLIC	
				No. of Beneficiaries	Hectares Benefitted	No. of Beneficiaries	Hectares Benefitted
North Pacific.....	248,737	12,151	12.9	3,602	94,954	9,749	167,783
Baja California...	224,762	10,079	22.3	2,633	75,344	7,444	149,418
Sinaloa.....	17,164	2,797	6.1	693	12,395	2,105	4,769
Sonora.....	6,810	275	24.7	375	6,397		
North.....	347,330	42,512	7.2	9,360	154,354	33,152	192,976
Coahuila...	153,179	27,012	5.6	2,243	67,444	24,769	114,974
Chihuahua...	55,672	6,536	8.5	2,231	35,333	3,305	19,339
Durango...	61,630	10,125	6.1	216	15,444	8,844	46,444
Nuevo León...	22,432	1,225	18.3	1,000	22,000	225	1,432
Tamaulipas	42,041	2,225	18.9	2,025	21,224	200	1,801
Central . . .	271,547	44,122	6.2	2,222	62,221	35,900	127,326
Aguascalientes...	12,557	2,344	5.4	522	4,723	1,821	7,834
Guatemala...	41,733	3,827	10.9	1,734	15,333	2,093	26,400
Hidalgo...	27,182	11,072	2.5	2,222	11,222	8,850	15,960
Jalisco . . .	41,112	7,731	5.3	512	12,222	7,219	28,890
México . . .	21,222	4,222	5.0	1,222	5,222	3,000	16,000
Michoacán...	41,112	7,731	5.3	512	12,222	7,219	28,890
Morelos	2,000	1,000	2.0	1,000	2,000		
Quintana Roo...	1,000	500	2.0	500	1,000		
South Pacific	4,733	1,222	3.9	1,222	4,733		
Oaxaca . . .	4,733	1,222	3.9	1,222	4,733		
Total . . .	2,000,000	100,000	20.0	100,000	1,000,000	100,000	1,000,000

* Data from Mexican National Census of 1940.

† Only those states which have irrigation projects are shown.

TABLE 17
LANDHOLDINGS IN MEXICO, CLASSIFIED ACCORDING TO
SIZE OF HOLDING, BY REGIONS, 1940*
(Percentage Distribution)

SIZE OF HOLDING (HECTARES)	TOTAL LANDHOLDINGS		PERCENTAGE OF LANDHOLDINGS, BY REGIONS				
	No.	Per Cent	North Pacific	North	Central	Gulf	South Pacific
Under 1.....	497,372	17.6	2.5	5.4	25.5	7.9	15.4
1 - 5....	481,221	15.3	10.1	11.5	15.4	12.8	25.1
5.1- 10....	74,187	2.6	2.4	4.1	2.0	4.0	2.0
10.1- 25....	82,013	2.9	3.2	4.7	2.0	5.3	2.0
25.1- 50....	46,466	1.7	1.8	2.9	1.1	2.9	1.2
50.1- 100....	31,763	1.1	1.3	2.1	0.7	1.6	0.9
100.1- 200....	22,695	0.8	0.8	1.6	0.5	1.2	0.7
200.1- 500....	17,428	0.6	1.2	1.3	0.3	0.8	0.7
500.1- 1,000....	6,087	0.2	0.5	0.5	0.1	0.3	0.2
1,000.1- 5,000....	6,883	0.2	0.9	0.7	0.1	0.3	0.2
5,000.1-10,000....	1,342	0.1	0.2	0.2	0.01	0.1	0.03
10,000.1-20,000....	751	0.02	0.1	0.1	.....	0.02	0.01
20,000.1-40,000....	420	0.01	0.03	0.1	.....	0.01	0.01
Over 40,000.....	301	0.01	0.02	0.04	.....	0.01	0.01
Total private holdings.....	1,218,929	43.2	24.9	35.4	47.6	37.1	48.4
No. of ejidatarios†...	1,601,392	56.8	75.1	64.8	52.4	62.9	51.6
Total Landhold- ings.....	2,820,321	100.0	100.0	100.0	100.0	100.0	100.0

* Preliminary data from Dirección General de Estadística.

† The ejido holdings are not distributed according to size here and it is assumed that each has the right to a landholding. This
 size of ejido holding see Appendix A, Tables 23 and 24.

TABLE 18

NUMBER AND SIZE OF LANDHOLDINGS IN MEXICO WITH MORE THAN
1,000 HECTARES OF LAND, BY REGIONS AND STATES*

REGION AND STATE	No. of Holdings						Total over 10,000 Hectares
	1,000.1 to 2,000 Hectares	2,000.1 to 10,000 Hectares	10,000.1 to 20,000 Hectares	20,000.1 to 40,000 Hectares	Over 40,000 Hectares	Total over 1,000 Hectares	
North Pacific.....	1,226	229	125	44	22	1,646	191
Baja California N....	57	2	5	4	5	73	14
Baja California S....	308	13	23	...	...	344	23
Nayarit.....	50	12	8	5	7	82	20
Sinaloa.....	215	74	29	9	...	327	53
Sonora	596	123	55	25	19	818	91
North.....	3,219	725	426	222	128	4,722	594
Coahuila	399	163	99	71	57	789	212
Chihuahua... ..	712	171	122	102	68	1,175	276
Durango.....	454	111	63	43	21	702	122
Nueva Lela.....	551	109	49	12	11	732	72
San Luis Potosí..	163	12	17	14	12	218	43
Tamaulipas.....	699	162	59	19	12	951	22
Zacatecas.....	225	51	22	15	12	325	69
Central.....	641	129	61	...	2	1,833	72
Aguascalientes.....	12	1	1	...	...	14	...
Distrito Federal.....	7	...	...	...	...	7	1
Guatemala.....	125	16	19	1	...	161	1
Hidalgo.....	24	5	...	...	...	29	1
Jalisco.....	223	23	24	5	5	280	22
México.....	22	7	5	2	...	36	7
Michoacán.....	122	13	...	2	2	149	12
Morelos.....	3	3	...	...	...	6	...
Puebla.....	108	12	7	...	...	127	7
Querétaro.....	21	3	...	...	...	24	1
Tlaxcala.....	2	...	...	...	...	2	...
Gulf.....	122	122	21	52	52	379	72
Campeche.....	122	22	22	22	22	212	22
Quintana Roo.....	2	2	22	22	22	72	22
Tabasco.....	22	2	2	2	2	32	22
Veracruz.....	222	22	22	22	2	312	22
Yucatán.....	122	22	...	2	2	152	7
South Pacific.....	122	122	22	22	22	312	22
Oaxaca.....	22	2	...	2	...	26	2
Chiapas.....	222	22	...	2	2	246	22
Guerrero.....	122	22	22	22	22	212	22
Oaxaca.....	122	22	22	22	22	212	22
Total.....	1,222	1,222	122	222	22	3,812	1,222

* Preliminary data from 1920 census, based on 1910 census, and 1920 census, based on 1910 census.

TABLE 21

NUMBER OF INHABITANTS LIVING ON EJIDOS AND PERCENTAGE THEY FORM OF: (a) THE TOTAL POPULATION, (b) THE POPULATION IN LOCALITIES OF 10,000 OR LESS, (c) THE POPULATION IN LOCALITIES OF 5,000 OR LESS, AND (d) THE POPULATION IN LOCALITIES OF 2,500 OR LESS, BY REGIONS AND STATES*

REGION AND STATE	EJIDO POPULATION	PERCENTAGE EJIDO POPULATION IS OF:			
		(a) Total Population	(b) Population 10,000 or Less	(c) Population 5,000 or Less	(d) Population 2,500 or Less
North Pacific.....	273,051	22.7	27.4	29.2	32.0
Baja California N.....	10,274	13.0	23.5	23.5	26.3
Baja California S.....	3,998	7.8	9.7	11.2	12.1
Nayarit.....	87,325	40.3	46.2	52.0	57.7
Sinaloa.....	105,170	21.3	24.7	25.9	27.3
Sonora.....	66,284	18.2	22.3	23.4	27.0
North.....	1,008,565	25.8	33.7	36.5	40.0
Coahuila.....	146,128	26.5	41.4	49.3	53.7
Chihuahua.....	139,552	22.4	29.7	32.1	35.3
Durango.....	167,710	34.7	39.5	41.0	45.6
Nuevo León.....	59,933	11.1	16.9	18.3	19.8
San Luis Potosí.....	246,710	36.3	42.2	45.5	48.7
Tamaulipas.....	87,523	19.1	30.8	34.4	35.0
Zacatecas.....	161,009	28.5	31.0	32.6	37.8
Central.....	2,438,916	25.9	36.0	39.2	44.6
Aguascalientes.....	32,074	19.8	40.4	40.4	46.5
Distrito Federal.....	82,947	4.7	40.8	57.4	76.5
Guanajuato.....	228,164	21.8	28.0	31.4	33.6
Hidalgo.....	265,470	34.4	38.3	39.0	42.0
Jalisco.....	259,186	18.3	23.8	27.2	31.1
México.....	554,616	48.4	50.3	53.5	62.6
Michoacán.....	341,472	28.9	32.0	35.2	40.6
Morelos.....	87,379	47.8	51.9	54.0	66.3
Puebla.....	415,752	32.1	37.0	39.3	44.5
Querétaro.....	85,525	34.9	40.5	41.8	43.3
Tlaxcala.....	86,331	38.5	38.5	44.2	54.7
Gulf.....	737,120	30.3	36.5	39.3	44.4
Campeche.....	36,645	40.5	54.5	61.6	80.4
Quintana Roo.....	6,253	33.3	33.3	33.3	44.4
Tabasco.....	75,132	26.3	28.8	29.7	32.1
Veracruz.....	401,981	24.8	29.5	31.2	34.9
Yucatán.....	217,109	51.9	70.6	84.0	101.2
South Pacific.....	534,406	19.9	20.9	21.8	23.7
Colima.....	15,819	20.1	28.1	32.0	36.6
Chiapas.....	161,830	23.8	25.4	27.0	28.4
Guerrero.....	184,042	25.1	25.6	26.9	29.4
Oaxaca.....	172,715	14.5	15.0	15.4	17.1
Total.....	4,992,058	25.4	32.5	35.0	39.1

* Data compiled from the *Segundo censo ejidal* and the *Sexto censo de población* (1940) (Dirección General de Estadística).

TABLE 22

PROPORTION WHICH EJIDATARIOS CONSTITUTE OF ALL PERSONS
ENGAGED IN AGRICULTURE, BY REGIONS AND STATES

Region and State	Total No. of Persons Engaged in Agriculture*	Total No. of Ejidatarios†	Percentage Ejidatarios Are of All Persons Engaged in Agriculture
North Pacific	239,354	103,792	43 4
Baja California N..	13,544	3,627	26 8
Baja California S.	7,533	2,410	32 0
Nayarit	50,242	29,137	58 0
Sinaloa	106,565	41,944	39 4
Sonora	61,470	26,674	43 4
North	730,589	318,115	43 5
Coahuila	86,727	46,240	53 3
Chihuahua	111,659	42,725	38 3
Durango	106,030	59,046	55 7
Nuevo León	89,995	20,909	23 2
San Luis Potosí	139,209	70,167	50 4
Tamaulipas	74,775	26,493	35 4
Zacatecas	122,194	52,535	43 0
Central	1,700,947	800,509	47 1
Aguascalientes	22,523	9,103	40 4
Distrito Federal	38,322	32,719	85 4
Guanajuato	219,445	74,389	33 9
Hidalgo	174,884	84,565	48 4
Jalisco	281,230	82,432	29 3
México	263,898	173,765	65 8
Michoacán	261,563	118,169	45 2
Morelos	42,064	29,218	69 5
Puebla	288,543	138,348	47 9
Querétaro	57,091	25,396	44 5
Tlaxcala	51,384	32,495	63 2
Gulf	507,093	209,705	41 4
Campeche	17,205	10,283	59 8
Quintana Roo	4,745	1,895	40 0
Tabasco	62,099	21,847	35 2
Veracruz	333,946	114,259	34 2
Yucatán	89,098	61,421	68 9
South Pacific	652,909	169,181	25 9
Colima	15,381	5,138	33 4
Chiapas	171,257	50,245	29 3
Guerrero	176,178	62,940	35 7
Oaxaca	290,093	50,858	17 5
Total	3,830,892	1,601,392	41 8

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística)

† Data from *Segundo censo ejidal* (1940) (Dirección General de Estadística).

TABLE 23

EJIDO LANDS CLASSIFIED ACCORDING TO AVERAGE NUMBER OF HECTARES
PER EJIDATARIO, BY REGIONS AND STATES*

Region and State	Total Area of Land in Ejidos (Hectares)	Total No. of Ejidatarios	Average No. of Hectares per Ejida- tario	No. of Ejida- tarios in Possession of Land	Average No. of Hectares per Ejida- tario in Possession of Land
North Pacific.....	2,772,574	103,792	26.7	71,563	38.7
Baja California N....	164,170	3,627	45.3	3,474	47.3
Baja California S....	66,379	2,410	27.1	1,191	54.9
Nayarit.....	584,381	29,137	20.1	19,843	29.5
Sinaloa.....	1,019,739	41,944	24.4	29,410	34.7
Sonora.....	938,905	26,674	35.2	17,645	53.3
North.....	13,049,320	318,115	41.0	249,732	52.3
Coahuila.....	1,527,188	46,240	33.0	38,673	39.5
Chihuahua.....	3,109,821	42,725	72.8	34,858	89.2
Durango.....	2,459,260	59,046	41.6	45,890	53.6
Nuevo León.....	812,942	20,909	38.9	15,707	51.8
San Luis Potosí.....	2,564,462	70,167	36.5	53,266	48.1
Tamaulipas.....	893,763	26,493	33.7	23,394	38.2
Zacatecas.....	1,681,884	52,535	32.0	37,944	44.3
Central.....	6,771,749	800,599	8.5	590,811	11.5
Aguascalientes.....	231,452	9,103	25.4	8,102	28.6
Distrito Federal.....	26,343	32,719	0.8	21,210	1.2
Guanajuato.....	853,834	74,389	11.5	53,744	15.9
Hidalgo.....	595,118	84,565	7.0	66,703	8.9
Jalisco.....	1,199,764	82,432	14.6	64,188	18.7
México.....	730,838	173,765	4.2	129,137	5.7
Michoacán.....	1,318,436	118,169	11.2	82,644	16.0
Morelos.....	314,837	29,218	10.8	20,974	15.0
Puebla.....	945,049	138,348	6.8	99,052	9.5
Querétaro.....	388,041	25,396	15.3	17,683	21.9
Tlaxcala.....	168,037	32,495	5.2	27,374	6.1
Gulf.....	3,982,939	209,705	19.0	181,471	21.9
Campeche.....	580,300	10,283	56.4	9,151	63.4
Quintana Roo.....	661,913	1,895	349.3	1,757	376.7
Tabasco.....	466,096	21,847	21.3	19,395	24.0
Veracruz.....	941,937	114,259	8.2	93,445	10.1
Yucatán.....	1,332,693	61,421	21.7	57,723	23.1
South Pacific.....	2,346,278	169,181	14.0	129,333	18.3
Colima.....	123,796	5,138	24.1	4,104	30.2
Chiapas.....	643,045	50,245	12.8	39,897	16.1
Guerrero.....	913,090	62,940	14.5	45,640	20.0
Oaxaca.....	666,347	50,858	13.1	39,692	16.8
Total.....	28,922,860	1,601,392	18.1	1,222,910	23.7

* Data from *Segundo censo ejidal* (1940) (Dirección General de Estadística).

TABLE 25

AVERAGE NUMBER OF DAYS PER YEAR WORKED BY THE EJIDATARIOS IN
AND OUT OF THE EJIDOS, BY REGIONS AND STATES*

REGION AND STATE	TOTAL DAYS WORKED		DAYS WORKED IN THE EJIDO		DAYS WORKED OUT OF THE EJIDO	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
North Pacific.....	258	100	203	78.7	55	21.3
Baja California N.....	254	100	243	95.7	11	4.3
Baja California S.....	273	100	182	66.7	91	33.3
Nayarit.....	267	100	246	92.1	21	7.9
Sinaloa.....	252	100	180	71.4	72	28.6
Sonora.....	244	100	163	66.8	81	33.2
North.....	251	100	201	80.1	50	19.9
Coahuila.....	261	100	219	83.9	42	16.1
Chihuahua.....	251	100	196	78.1	55	21.9
Durango.....	251	100	200	79.7	51	20.3
Nuevo León.....	256	100	204	79.7	52	20.3
San Luis Potosí.....	251	100	187	74.5	64	25.5
Tamaulipas.....	267	100	235	88.0	32	12.0
Zacatecas.....	221	100	165	74.7	56	25.3
Central.....	243	100	161	66.3	82	33.7
Aguascalientes.....	222	100	192	86.5	30	13.5
Distrito Federal.....	294	100	64	21.8	230	78.2
Guanajuato.....	227	100	201	88.5	26	11.5
Hidalgo.....	272	100	126	46.3	146	53.7
Jalisco.....	239	100	183	76.6	56	23.4
México.....	249	100	124	50.0	125	50.0
Michoacán.....	241	100	196	81.3	45	18.7
Morelos.....	256	100	181	70.7	75	29.3
Puebla.....	260	100	182	70.0	78	30.0
Querétaro.....	234	100	164	70.1	70	29.9
Tlaxcala.....	176	100	160	90.9	16	9.1
Gulf.....	260	100	195	75.0	65	25.0
Campeche.....	245	100	170	69.4	75	30.6
Quintana Roo.....	297	100	187	63.0	110	37.0
Tabasco.....	205	100	162	79.0	43	21.0
Veracruz.....	277	100	239	86.3	38	13.7
Yucatán.....	272	100	215	79.0	57	21.0
South Pacific.....	240	100	194	80.8	46	19.2
Colima.....	232	100	195	84.1	37	15.9
Chiapas.....	250	100	208	83.2	42	16.8
Guerrero.....	211	100	175	82.9	36	17.1
Oaxaca.....	265	100	197	74.3	68	25.7
Total.....	249	100	186	74.7	63	25.3

* Data from *Segundo censo ejidal* (1940) (Dirección General de Estadística).

TABLE 28
NUMBER OF FARM LABORERS IN MEXICO AND PERCENTAGE THEY CON-
STITUTE OF ALL PERSONS GAINFULLY EMPLOYED IN
AGRICULTURE, BY REGIONS AND STATES*

Region and State	No. of Farm Laborers	No. of Persons Engaged in Agriculture	Percentage Farm Laborers Are of Persons Engaged in Agriculture
North Pacific.....	120,862	239,354	50.3
Baja California N.....	6,056	13,544	22.4
Baja California S.....	2,916	7,533	38.7
Nayarit.....	25,463	50,242	50.7
Sinaloa.....	51,452	106,565	48.3
Sonora.....	34,475	61,470	56.1
North.....	336,802	730,589	46.1
Coahuila.....	41,017	86,727	47.4
Chihuahua.....	49,852	111,659	44.6
Durango.....	47,733	106,030	45.1
Nuevo León.....	43,896	89,995	48.8
San Luis Potosí.....	56,120	139,209	40.3
Tamaulipas.....	36,073	74,775	48.2
Zacatecas.....	62,111	122,194	50.8
Central.....	879,812	1,700,947	51.7
Aguascalientes.....	10,140	22,523	45.0
Distrito Federal.....	18,217	38,322	47.5
Guanajuato.....	135,446	219,445	61.7
Hidalgo.....	101,030	174,884	57.8
Jalisco.....	140,960	281,230	50.1
México.....	106,835	263,898	40.5
Michoacán.....	140,616	261,563	53.8
Morelos.....	22,999	42,064	54.7
Puebla.....	146,934	288,543	50.9
Querétaro.....	34,389	57,091	60.2
Tlaxcala.....	22,246	51,384	43.3
Gulf.....	245,087	507,093	48.3
Campeche.....	6,490	17,205	37.7
Quintana Roo.....	887	4,745	18.7
Tabasco.....	29,780	62,099	48.0
Veracruz.....	182,182	333,946	54.6
Yucatán.....	25,748	89,098	27.8
South Pacific.....	310,194	652,909	47.5
Colima.....	9,316	15,381	60.6
Chiapas.....	75,525	171,257	44.1
Guerrero.....	97,697	176,178	55.5
Oaxaca.....	127,656	290,093	44.0
Total.....	1,892,257	3,830,892	49.4

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

TABLE 30

DWELLINGS IN MEXICO, CLASSIFIED ACCORDING TO TYPE, BY REGIONS AND STATES*

REGION AND STATE	TOTAL DWELLINGS		HUTS OR HOVELS		SINGLE-FAMILY HOUSES		APARTMENTS OR HOTELS	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
North Pacific...	256,177	100	105,320	41.1	149,734	58.4	1,123	0.4
Baja California N.....	17,269	100	6,243	36.2	10,896	63.1	130	0.8
Baja California S.....	9,348	100	4,912	52.5	4,244	45.4	192	2.1
Nayarit.....	53,793	100	26,801	49.8	26,858	49.9	134	0.2
Sinaloa.....	101,439	100	46,401	45.7	54,776	54.0	262	0.3
Sonora.....	74,328	100	20,963	28.2	52,960	71.3	405	0.5
North.....	772,652	100	229,458	29.7	534,469	69.2	8,725	1.1
Coahuila....	107,455	100	22,927	21.3	83,800	78.0	728	0.7
Chihuahua...	116,853	100	14,334	12.3	99,915	85.5	2,604	2.2
Durango.....	97,388	100	13,829	14.2	82,770	85.0	789	0.8
Nuevo León..	114,292	100	45,159	39.5	68,788	60.2	345	0.3
San Luis Potosí.....	135,953	100	69,189	50.9	65,848	48.4	916	0.7
Tamaulipas..	85,304	100	44,188	51.8	38,412	45.0	2,704	3.2
Zacatecas....	115,407	100	19,832	17.2	94,936	82.3	639	0.6
Central.....	1,729,941	100	670,327	38.7	1,018,892	58.9	40,722	2.4
Aguascalientes.....	30,058	100	5,882	19.6	23,825	79.3	351	1.2
Distrito Federal.....	152,738	100	23,595	15.4	102,358	67.0	26,785	17.5
Guanajuato..	226,163	100	99,205	43.9	126,275	55.8	688	0.3
Hidalgo.....	156,458	100	87,544	56.0	66,799	42.7	2,115	1.4
Jalisco.....	308,831	100	63,236	20.5	243,581	78.9	2,014	0.7
México.....	233,023	100	68,931	29.6	162,876	69.9	1,216	0.5
Michoacán...	242,931	100	99,623	41.0	142,238	58.6	1,070	0.4
Morelos.....	33,568	100	14,996	44.7	17,827	53.1	745	2.2
Puebla.....	246,317	100	155,133	63.0	86,074	34.9	5,110	2.1
Querétaro....	54,288	100	33,811	62.3	20,187	37.2	290	0.5
Tlaxcala.....	45,561	100	18,371	40.3	26,852	58.9	338	0.7
Gulf.....	483,766	100	288,471	59.6	190,246	39.3	5,049	1.0
Campeche...	19,423	100	10,842	55.8	8,545	44.0	36	0.2
Quintana Roo	3,559	100	2,235	64.2	1,267	35.6	7	0.2
Tabasco.....	49,275	100	40,008	81.2	8,903	18.1	364	0.7
Veracruz....	317,295	100	188,393	59.4	124,330	39.2	4,572	1.4
Yucatán.....	94,214	100	46,943	49.8	47,201	50.1	70	0.1
South Pacific...	564,434	100	414,230	73.4	148,464	26.3	1,740	0.3
Colima.....	18,194	100	9,038	49.7	9,070	49.9	86	0.5
Chiapas.....	138,492	100	96,102	69.4	42,000	30.3	390	0.3
Guerrero.....	149,280	100	105,236	70.5	43,731	29.3	313	0.2
Oaxaca.....	258,468	100	203,854	78.9	53,663	20.8	951	0.4
Total.....	3,806,970	100	1,707,806	44.9	2,041,805	53.6	57,359	1.5

* Data from *Segundo censo de edificios* (1939) (Dirección General de Estadística).

TABLE 31

DWELLINGS IN MUNICIPALITIES HAVING NO URBAN POPULATION, CLASSIFIED
ACCORDING TO TYPE OF DWELLING, BY REGIONS AND STATES*

REGION AND STATE	TOTAL DWELLINGS		HUTS OR HOVELS		SINGLE-FAMILY HOUSES		APARTMENTS OR HOTELS	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
North Pacific	81,517	100	36,818	45.2	44,590	54.7	109	0.1
Baja California N.								
Baja California S.	3,252	100	2,376	73.1	875	26.9	1	.....
Nayarit	16,309	100	10,013	61.4	6,282	38.5	14	0.1
Sinaloa	31,028	100	15,269	49.2	15,702	50.6	57	0.2
Sonora	30,928	100	9,160	29.6	21,731	70.3	37	0.1
North	292,868	100	119,559	40.8	172,631	58.9	678	0.2
Coahuila	16,425	100	7,237	44.1	9,179	55.9	9	0.1
Chihuahua	61,693	100	10,124	16.4	51,256	83.1	313	0.5
Durango	33,781	100	7,580	22.4	26,171	77.5	30	0.1
Nuevo León	40,896	100	22,455	54.9	18,415	45.0	26	0.1
San Luis Potosí	59,831	100	33,260	55.6	26,540	44.4	31	0.1
Tamaulipas	41,370	100	28,516	68.9	12,605	30.5	249	0.6
Zacatecas	38,872	100	10,387	26.7	28,465	73.2	20	0.1
Central	629,109	100	332,126	52.8	296,263	47.1	720	0.1
Aguascalientes	6,374	100	1,646	25.8	4,727	74.2	1	.....
Distrito Federal	1,238	100	151	12.2	1,078	87.1	9	0.7
Guanajuato	25,692	100	13,027	50.7	12,660	49.3	5	.....
Hidalgo	104,733	100	65,555	62.6	39,018	37.3	160	0.2
Jalisco	80,412	100	23,467	29.2	56,903	70.8	42	0.1
México	119,014	100	44,949	37.8	73,980	62.2	85	0.1
Michoacán	70,719	100	39,129	55.3	31,528	44.6	62	0.1
Morelos	16,632	100	7,694	46.3	8,872	53.3	66	0.4
Puebla	150,773	100	105,264	69.8	45,259	30.0	250	0.2
Querétaro	30,056	100	20,677	68.8	9,367	31.2	12	.....
Tlaxcala	23,466	100	10,567	45.0	12,871	54.8	28	0.1
Gulf	213,059	100	147,122	69.1	65,590	30.8	347	0.2
Campeche	5,412	100	3,426	63.3	1,982	36.6	4	0.1
Quintana Roo	1,903	100	1,322	69.5	580	30.5	1	0.1
Tabasco	18,225	100	15,638	85.8	2,567	14.1	20	0.1
Veracruz	152,374	100	105,369	69.2	46,694	30.6	311	0.2
Yucatán	35,145	100	21,367	60.8	13,767	39.2	11	.....
South Pacific	379,782	100	303,108	79.8	76,365	20.1	309	0.1
Colima	4,838	100	2,885	59.6	1,947	40.2	6	0.1
Chiapas	92,562	100	72,850	78.7	19,644	21.2	68	0.1
Guerrero	76,717	100	57,882	75.4	18,781	24.5	54	0.1
Oaxaca	205,665	100	169,491	82.4	35,993	17.5	181	0.1
Total	1,596,335	100	938,733	58.8	655,439	41.1	2,163	0.1

* Data from *Segundo censo de edificios* (1939) (Dirección General de Estadística).

TABLE 32
POPULATION LIVING IN LOCALITIES OF 10,000 OR LESS INHABITANTS
CLASSIFIED ACCORDING TO TYPE OF BED USED
BY REGIONS AND STATES*
(Percentage Distribution)

REGION AND STATE	POPULATION LIVING IN LOCALITIES OF 10,000 OR LESS IN- HABITANTS	PERCENTAGE USING SPECIFIED TYPE OF BED			
		Cot or Bed	Tapestry	Ham- mock	Ground or Floor
North Pacific.....	100	81.7	0.6	0.1	8.7
Baja California N....	100	92.6	2.5	...	4.0
Baja California S....	100	73.6	21.6	...	4.8
Nayarit.....	100	77.0	18.1	0.1	4.8
Sinaloa.....	100	91.7	2.6	...	2.6
Sonora.....	100	65.6	13.5	0.1	20.0
North.....	100	73.5	3.8	0.1	22.7
Coahuila	100	81.3	2.0	0.1	15.8
Chihuahua.....	100	76.6	2.0	...	20.4
Durango.....	100	83.2	2.0	...	13.0
Nuevo León.....	100	84.5	1.5	...	14.0
San Luis Potosí....	100	50.7	7.7	0.1	41.5
Tamaulipas.....	100	86.7	3.4	0.1	9.8
Zacatecas.....	100	68.3	3.2	0.1	28.5
Central.....	100	46.7	13.8	0.1	39.5
Aguascalientes.....	100	51.4	3.8	0.1	41.7
Distrito Federal.....	100	59.9	5.8	...	34.3
Guanajuato.....	100	46.5	12.6	...	40.0
Hidalgo.....	100	25.7	7.8	0.1	66.4
Jalisco.....	100	65.2	21.2	0.1	10.6
México.....	100	43.1	7.0	...	49.2
Michoacán.....	100	63.4	5.3	...	31.3
Morelos.....	100	63.7	23.1	...	11.1
Puebla.....	100	29.2	21.6	0.1	49.1
Quercétaro.....	100	27.1	9.5	...	63.4
Tlaxcala.....	100	36.4	26.6	...	37.0
Gulf.....	100	47.6	17.6	19.2	15.5
Campeche.....	100	9.2	2.1	88.5	0.2
Quintana Roo.....	100	23.2	1.2	70.4	0.2
Tabasco.....	100	47.4	49.7	2.4	0.5
Veraacruz.....	100	60.5	16.4	0.2	22.0
Yucatán.....	100	0.3	0.1	99.6	...
South Pacific.....	100	41.4	36.8	0.4	21.5
Colima.....	100	62.4	35.9	0.2	1.4
Chiapas.....	100	48.3	44.3	0.3	7.1
Guerrero.....	100	44.2	43.4	0.4	7.0
Oaxaca.....	100	34.8	25.3	0.4	39.5
Total.....	100	53.4	15.9	2.6	28.0

* Data from *Sexto censo de población* (1940) (Dirección General de Estadística).

TABLE 33

BUILDINGS IN MUNICIPALITIES HAVING NO URBAN POPULATION
CLASSIFIED ACCORDING TO THE PRESENCE OR ABSENCE OF
DRINKING WATER, BY REGIONS AND STATES*

REGION AND STATE	ALL BUILDINGS†	BUILDINGS WITHOUT DRINKING WATER	
		No.	Per Cent
North Pacific.....	88,532	57,117	68.4
Baja California N.....			
Baja California S.....	3,312	2,008	80.6
Nayarit.....	16,971	14,952	88.1
Sinaloa.....	31,590	20,370	64.5
Sonora.....	31,659	19,127	60.4
North.....	299,794	206,261	68.8
Coahuila.....	16,963	10,385	61.2
Chihuahua.....	63,492	45,411	71.5
Durango.....	34,505	24,196	70.1
Nuevo León.....	41,749	22,371	53.6
San Luis Potosí.....	60,769	45,972	75.7
Tamaulipas.....	42,676	31,426	73.6
Zacatecas.....	39,640	26,500	66.9
Central.....	638,418	473,762	74.2
Agascalientes.....	6,410	4,690	73.2
Distrito Federal.....	1,232	44	3.4
Guanajuato.....	25,778	17,608	68.3
Hidalgo.....	106,398	87,988	82.7
Jalisco.....	81,982	65,068	79.4
México.....	120,931	83,959	69.4
Michoacán.....	71,429	56,824	79.6
Morelos.....	16,931	13,363	78.9
Puebla.....	153,052	109,634	71.6
Querétaro.....	30,428	23,021	75.7
Tlaxcala.....	23,797	11,563	48.6
Gulf.....	216,166	138,764	64.2
Campeche.....	5,485	3,259	59.4
Quintana Roo.....	2,042	1,044	51.1
Tabasco.....	18,419	8,657	47.0
Veracruz.....	154,622	110,031	71.2
Yucatán.....	35,598	15,773	44.3
South Pacific.....	384,708	299,584	77.9
Colima.....	4,892	3,427	70.1
Chiapas.....	93,506	67,514	72.2
Guerrero.....	77,975	67,833	87.0
Oaxaca.....	208,335	160,810	77.2
Total.....	1,622,618	1,175,488	72.4

* Data from *Segundo censo de edificios* (1933) (Dirección General de Estadística).

† More than 98 per cent of all buildings listed in this census are dwellings.

TABLE 34

NUMBER OF TELEPHONES IN MEXICO IN RELATION TO NUMBER OF
INHABITANTS, BY REGIONS AND STATES, 1940*

REGION AND STATE	TELEPHONES		INHABITANTS		No. of INHABITANTS PER TELE- PHONE
	No.	Per Cent	No.	Per Cent	
North Pacific.....	6,713	3.7	1,204,073	6.1	179.4
Baja California N.....	1,072	0.6	78,907	0.4	73.6
Baja California S.....	77	.....	51,471	0.3	668.5
Nayarit.....	225	0.1	216,698	1.1	963.1
Sinaloa.....	2,124	1.2	492,821	2.5	232.0
Sonora.....	3,215	1.8	364,176	1.9	113.3
North.....	33,473	18.6	3,902,685	19.9	116.6
Coahuila.....	6,558	3.7	550,717	2.8	84.0
Chihuahua.....	4,202	2.3	623,944	3.2	148.5
Durango.....	1,890	1.1	483,829	2.5	258.0
Nuevo León.....	11,061	6.2	541,147	2.8	48.9
San Luis Potosí.....	4,368	2.4	678,779	3.5	155.4
Tamaulipas.....	5,182	2.9	458,832	2.3	88.5
Zacatecas.....	212	0.1	565,437	2.9	2,667.2
Central.....	129,820	72.3	9,430,009	48.0	72.6
Aguascalientes.....	1,280	0.7	161,693	0.8	126.3
Distrito Federal.....	93,839	55.1	1,757,530	8.9	17.8
Guanajuato.....	4,870	2.7	1,046,490	5.3	214.9
Hidalgo.....	2,195	1.2	771,818	3.9	351.6
Jalisco.....	9,883	5.5	1,418,310	7.2	143.5
México.....	1,793	1.0	1,146,034	5.8	639.2
Michoacán.....	1,923	1.1	1,182,003	6.0	613.1
Morelos.....	945	0.5	182,711	0.9	193.3
Puebla.....	7,072	3.9	1,294,620	6.6	183.1
Querétaro.....	817	0.5	244,737	1.2	299.6
Tlaxcala.....	207	0.1	224,063	1.1	1,082.4
Gulf.....	8,486	4.7	2,432,390	12.4	286.6
Campeche.....	172	0.1	90,460	0.5	525.9
Quintana Roo.....	.....	.....	18,752	0.1	.....
Tabasco.....	317	0.2	285,630	1.5	901.0
Veracruz.....	5,600	3.1	1,619,338	8.2	289.2
Yucatán.....	2,397	1.3	418,210	2.1	174.5
South Pacific.....	1,025	0.6	2,684,395	13.7	2,618.9
Colima.....	243	0.1	78,806	0.4	324.3
Chiapas.....	148	0.1	679,885	3.5	4,593.8
Guerrero.....	75	.....	732,910	3.7	9,772.1
Oaxaca.....	559	0.3	1,192,794	6.1	2,133.8
Total.....	179,526	100.0	19,653,552	100.0	109.5

* *Anuario estadístico de los Estados Unidos Mexicanos* (1941), pp. 738-36.

TABLE 35

INHABITANTS OF MEXICO, CLASSIFIED ACCORDING TO WHETHER OR NOT THEY
EAT WHEAT BREAD, BY REGIONS AND STATES AND BY
SIZE OF COMMUNITY*
(Percentage Distribution)

REGION AND STATE	TOTAL MEXICO			LOCALITIES OF OVER 10,000 INHABITANTS			LOCALITIES OF 10,000 OR LESS INHABITANTS		
	Total Popu- lation	Per Cent Eating Wheat Bread	Per Cent Not Eating Wheat Bread	Total Popu- lation	Per Cent Eating Wheat Bread	Per Cent Not Eating Wheat Bread	Total Popu- lation	Per Cent Eating Wheat Bread	Per Cent Not Eating Wheat Bread
North Pacific.....	100	55.8	44.2	100	85.1	14.9	100	49.7	50.3
Baja California N.....	100	95.0	5.0	100	95.5	4.5	100	94.6	5.4
Baja California S.....	100	55.8	44.2	100	58.0	42.0	100	55.2	44.8
Nayarit.....	100	62.5	37.5	100	90.9	9.1	100	58.3	41.7
Sinaloa.....	100	33.7	66.3	100	84.5	15.5	100	25.7	74.3
Sonora.....	100	73.2	26.8	100	82.2	17.8	100	71.1	28.9
North.....	100	44.7	55.3	100	83.0	17.0	100	33.0	67.0
Coahuila.....	100	57.5	42.5	100	78.6	21.4	100	45.7	54.3
Chihuahua.....	100	52.1	47.9	100	87.5	12.5	100	40.0	60.0
Durango.....	100	37.3	62.7	100	80.4	19.6	100	31.3	68.7
Nuevo León.....	100	69.8	30.2	100	93.0	7.0	100	57.7	42.3
San Luis Potosí.....	100	25.2	74.8	100	72.7	27.3	100	17.6	82.4
Tamaulipas.....	100	57.2	42.8	100	84.5	15.5	100	40.5	59.5
Zacatecas.....	100	19.7	80.3	100	64.4	35.6	100	15.7	84.3
Central.....	100	42.5	57.5	100	85.9	14.1	100	25.6	74.4
Aguascalientes.....	100	47.7	52.3	100	81.2	18.8	100	13.0	87.0
Distrito Federal.....	100	87.6	12.4	100	92.0	8.0	100	53.4	46.6
Guanajuato.....	100	24.5	75.5	100	59.1	40.9	100	14.7	85.3
Hidalgo.....	100	30.9	69.1	100	89.0	11.0	100	24.3	75.7
Jalisco.....	100	40.3	59.7	100	80.1	19.9	100	28.3	71.7
México.....	100	30.0	70.0	100	95.1	4.9	100	27.4	72.6
Michoacán.....	100	29.5	70.5	100	70.6	29.4	100	25.1	74.9
Morcos.....	100	67.2	32.8	100	97.5	2.5	100	64.6	35.4
Puebla.....	100	31.2	68.8	100	88.5	11.5	100	22.4	77.6
Querétaro ..	100	22.0	78.0	100	66.4	33.6	100	14.9	85.1
Tlaxcala.....	100	24.8	75.2	100	.....	.....	100	24.8	75.2
Gulf.....	100	61.2	38.8	100	92.9	7.1	100	54.7	45.3
Campeche.....	100	86.2	13.8	100	95.7	4.3	100	83.0	17.0
Quintana Roo.....	100	30.0	70.0	100	.....	.....	100	30.0	70.0
Tabasco.....	100	37.8	62.2	100	88.2	11.8	100	33.0	67.0
Veracruz.....	100	55.8	44.2	100	91.7	8.3	100	49.1	50.9
Yucatán.....	100	94.3	5.7	100	95.9	4.1	100	93.7	6.3
South Pacific.....	100	35.1	64.9	100	83.6	16.4	100	32.8	67.2
Colima.....	100	71.7	28.3	100	89.9	10.1	100	64.4	35.6
Chiapas.....	100	37.5	62.5	100	79.4	20.6	100	34.7	65.3
Guerrero.....	100	21.1	78.9	100	92.8	7.2	100	19.9	80.1
Oaxaca.....	100	39.8	60.2	100	81.7	18.3	100	38.2	61.8
Total.....	100	45.1	54.9	100	85.8	14.2	100	33.6	66.4

* Data from Sexto censo de población (1940) (Dirección General de Estadística).

TABLE 36

TOTAL DEATHS PER 1,000 INHABITANTS, BY REGIONS AND STATES, 1939-43*

Region and State	1939	1940	1941	1942	1943	Five-Year Average
North Pacific.....	18.7	17.0	17.2	17.2	17.2	17.5
Baja California N.....	16.6	17.5	14.2	17.6	18.1	16.8
Baja California S.....	13.3	12.8	15.7	16.1	16.0	14.8
Nayarit.....	20.9	16.8	18.9	18.1	19.8	18.9
Sinaloa.....	16.8	16.4	16.7	15.6	14.3	16.0
Sonora.....	21.3	18.4	17.8	18.8	19.6	19.2
North.....	20.4	19.8	19.6	20.5	20.2	20.1
Coahuila.....	23.4	23.5	21.9	23.1	23.0	23.0
Chihuahua.....	18.7	17.9	18.6	18.3	18.3	18.4
Durango.....	18.1	19.6	18.5	20.8	17.0	18.8
Nuevo León.....	18.3	17.4	17.5	16.4	18.6	17.6
San Luis Potosí.....	23.8	21.8	22.5	23.0	24.3	23.1
Tamaulipas.....	13.2	13.7	14.2	15.1	15.0	14.2
Zacatecas.....	25.2	23.5	22.0	25.6	22.9	23.8
Central.....	26.9	25.8	24.4	25.2	25.0	25.5
Aguascalientes.....	27.5	25.2	20.8	27.0	23.5	24.8
Distrito Federal.....	25.3	24.2	23.7	24.0	23.1	24.1
Guanajuato.....	32.7	33.5	25.7	27.1	32.0	30.2
Hidalgo.....	25.0	23.0	22.9	24.6	23.7	23.8
Jalisco.....	24.5	23.5	22.2	22.7	22.5	23.1
México.....	28.6	26.8	23.9	25.9	24.2	25.9
Michoacán.....	25.1	21.9	22.3	22.0	20.4	22.3
Morelos.....	27.2	25.5	25.0	23.4	25.0	25.2
Puebla.....	27.9	27.8	30.1	29.9	29.2	29.0
Querétaro.....	26.7	28.8	23.3	26.2	27.2	26.4
Tlaxcala.....	28.9	27.4	25.9	30.1	30.0	29.5
Gulf.....	17.4	18.1	18.9	20.9	19.7	19.0
Campeche.....	18.2	17.4	18.5	21.0	24.1	19.8
Quintana Roo.....	10.4	10.7	13.8	18.7	17.7	14.3
Tabasco.....	14.7	14.5	14.9	17.7	21.4	16.6
Veracruz.....	17.0	17.3	17.7	19.1	17.3	17.7
Yucatán.....	21.3	24.0	26.8	30.4	27.0	25.9
South Pacific.....	21.6	23.7	22.9	22.1	21.8	22.4
Colima.....	29.8	26.2	23.8	21.8	24.0	25.1
Chiapas.....	18.0	18.1	19.8	20.6	20.9	19.5
Guerrero.....	16.8	16.4	19.1	17.7	17.1	17.4
Oaxaca.....	26.0	31.2	26.9	25.8	25.1	27.0
Total.....	23.2	22.8	22.1	22.8	22.4	22.7

* Data from Dirección General de Estadística.

TABLE 37

DEATHS OF INFANTS UNDER ONE YEAR OF AGE PER 1,000 LIVE BIRTHS
BY REGIONS AND STATES, 1939-43*

Region and State	1939	1940	1941	1942	1943	Five-Year Average
North Pacific	108	104	104	92	93	100
Baja California N. . .	116	106	86	105	92	101
Baja California S. . . .	92	87	108	95	111	99
Nayarit	118	111	112	105	112	112
Sinaloa	93	105	93	70	76	87
Sonora	119	101	114	109	99	108
North	111	110	111	107	110	110
Coahuila	121	115	133	115	125	122
Chihuahua	120	105	115	119	113	114
Durango	95	106	98	98	85	96
Nuevo León	104	106	106	101	116	107
San Luis Potosí	110	102	105	105	106	106
Tamaulipas	82	92	88	58	89	82
Zacatecas	131	134	125	145	128	133
Central	146	148	142	137	136	142
Aguascalientes	171	156	136	155	136	151
Distrito Federal	196	196	191	157	157	179
Guanajuato	153	159	134	135	150	146
Hidalgo	128	121	117	115	108	118
Jalisco	146	147	144	145	135	143
México	143	155	149	144	139	146
Michoacán	115	109	110	105	104	109
Morelos	109	104	104	106	112	107
Puebla	136	143	146	141	141	141
Querétaro	116	124	115	137	121	123
Tlaxcala	157	146	145	150	151	150
Gulf	80	94	92	100	80	89
Campeche	71	78	71	77	87	77
Quintana Roo	66	74	81	101	86	82
Tabasco	65	80	75	90	81	78
Veraacruz	76	89	85	94	71	83
Yucatán	103	121	130	131	106	118
South Pacific	98	105	105	94	103	101
Colima	148	151	140	120	139	140
Chiapas	83	93	105	95	92	94
Guerrero	66	68	85	75	80	75
Oaxaca	121	132	114	104	121	118
Total	123	126	123	118	117	121

* Data from Dirección General de Estadística.

TABLE 38

DEATHS AND DEATH RATES PER 1,000 INHABITANTS IN RURAL
AND URBAN AREAS OF MEXICO, 1943*

REGION AND STATE	NO. OF DEATHS			DEATHS PER 1,000 INHABITANTS		
	Total	Rural	Urban	Total	Rural	Urban
North Pacific.	22,911	12,688	10,223	17.2	13.5	26.3
Baja California N. . . .	1,681	548	1,133	18.1	12.0	24.2
Baja California S. . . .	898	501	397	16.0	13.9	19.8
Nayarit.	4,692	2,528	2,164	19.8	15.3	30.3
Sinaloa.	7,688	4,940	2,739	14.3	11.8	23.3
Sonora.	7,952	4,162	3,790	19.6	15.2	28.6
North.	86,935	48,090	38,845	20.2	17.3	25.4
Coahuila.	14,086	5,941	8,145	23.1	19.6	26.3
Chihuahua.	12,527	6,285	6,242	18.3	14.5	24.9
Durango.	9,116	5,947	3,169	17.0	14.6	24.6
Nuevo León.	11,282	4,721	6,561	18.6	13.9	24.6
San Luis Potosí.	18,042	12,350	5,692	24.3	22.3	30.3
Tamaulipas.	7,621	2,502	5,119	15.0	9.0	22.2
Zacatecas.	14,261	10,344	3,917	22.9	22.0	25.5
Central.	252,073	146,214	105,859	25.0	24.9	25.0
Aguascalientes.	4,117	1,798	2,319	23.5	24.1	23.1
Distrito Federal.	42,924	2,337	40,587	23.0	20.3	23.2
Guanajuato.	36,590	22,262	14,328	32.0	30.0	35.8
Hidalgo.	19,354	15,698	3,656	23.7	23.5	24.7
Jalisco.	34,359	18,167	16,192	22.5	20.2	25.7
México.	29,838	25,349	4,489	24.2	26.6	16.1
Michoacán.	25,886	16,182	9,704	20.4	17.9	26.4
Morelos.	4,955	3,110	1,845	25.0	21.8	33.4
Puebla.	39,671	30,419	9,252	29.2	31.0	24.5
Querétaro.	7,127	5,191	1,936	27.2	24.5	38.3
Tlaxcala.	7,252	5,701	1,551	30.0	33.5	21.7
Gulf.	50,730	30,472	20,258	19.7	17.3	24.8
Campeche.	2,365	1,022	1,343	24.1	20.7	27.6
Quintana Roo.	360	216	144	17.7	14.2	28.5
Tabasco.	6,526	5,186	1,340	21.4	20.7	24.3
Veracruz.	29,586	17,805	11,781	17.3	14.6	23.9
Yucatán.	11,893	6,243	5,650	27.0	27.6	26.3
South Pacific.	62,301	50,559	11,742	21.8	21.1	25.4
Colima.	2,034	981	1,053	24.0	21.1	27.6
Chiapas.	15,173	11,954	3,219	20.9	19.6	27.6
Guerrero.	13,582	10,687	2,895	17.1	15.8	25.1
Oaxaca.	31,512	26,937	4,575	25.1	25.3	23.8
Total.	474,950	288,023	186,927	22.4	21.0	25.2

* Data from Dirección General de Estadística.

TABLE 30
TOTAL NUMBER OF PEOPLE ENROLLED IN THE ELEMENTARY SCHOOLS OF MEXICO IN 1942
ACCORDING TO TYPE OF SCHOOL AND GRADE*

Type of school	Total Enrolled in All Grades		Grade I		Grade II		Grade III		Grade IV		Grade V		Grade VI	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Total	9,154,368	100	1,070,100	30.0	438,098	21.3	281,743	13.1	167,331	7.8	97,866	4.5	72,972	3.4
Public	1,923,176	100	846,333	31.9	301,237	21.5	231,821	12.7	130,732	7.2	72,001	3.9	52,432	2.9
Private	1,123,327	100	605,613	33.7	240,399	21.3	138,256	12.3	75,540	6.7	39,805	3.5	29,009	2.6
State and municipal	498,340	100	340,763	43.9	131,138	21.7	93,363	13.4	55,242	7.9	32,696	4.7	23,423	3.4
Private	107,831	100	36,294	33.9	39,135	19.2	36,303	15.8	21,133	12.6	16,535	9.9	14,139	8.5
Private with fee	60,313	100	39,293	47.3	14,709	21.2	9,899	14.3	5,988	8.6	3,488	5.0	2,328	3.4
Other	97,063	100	23,821	24.3	17,446	17.8	16,606	17.0	15,165	15.5	18,067	13.3	11,861	12.1
Total	101,011	100	33,083	43.1	34,334	21.2	28,417	14.1	15,896	9.5	9,310	3.8	6,351	3.9

* Data from *Encuesta General de Población*.

TABLE 40
NUMBER OF PUPILS ENROLLED IN THE RURAL ELEMENTARY SCHOOLS OF MEXICO IN 1942
ACCORDING TO TYPE OF SCHOOL AND GRADE*

TYPE OF SCHOOL	TOTAL ENROLMENT IN ALL GRADES		GRADE I		GRADE II		GRADE III		GRADE IV		GRADE V		GRADE VI	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Total.....	1,011,940	100	652,411	64.5	217,428	21.4	100,133	9.9	34,153	3.4	5,654	0.6	2,161	0.2
Public.....	940,394	100	603,590	64.2	203,670	21.7	93,859	10.0	31,863	3.4	5,346	0.6	2,066	0.2
Federal.....	724,275	100	461,603	63.7	155,583	21.5	73,694	10.2	26,947	3.7	4,636	0.6	1,812	0.3
State and municipal.....	216,119	100	141,987	65.7	48,087	22.3	20,165	9.3	4,916	2.3	710	0.3	254	0.1
Private.....	20,946	100	14,495	69.2	4,102	19.8	1,767	8.4	450	2.1	48	0.3	24	0.1
Article 123.....	20,749	100	14,373	69.3	4,141	20.0	1,737	8.4	441	2.1	39	0.2	18	0.1
Private initiative.....	197	100	122	61.9	21	10.7	30	15.2	9	4.6	9	4.6	6	3.0
Mixed.....	50,600	100	34,326	67.8	9,596	19.0	4,507	8.9	1,840	3.6	260	0.5	71	0.1

* Data from Dirección General de Estadística.

TABLE II
NUMBER OF PUPILS ENROLLED IN THE URBAN ELEMENTARY SCHOOLS OF MEXICO IN 1942
ACCORDING TO TYPE OF SCHOOL AND GRADE*

Type of School	TOTAL ENROLLMENT IN ALL GRADES		GRADE I		GRADE II		GRADE III		GRADE IV		GRADE V		GRADE VI	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Total.....	1,142,428	100	423,749	37.1	240,868	21.0	191,610	15.9	133,178	11.7	92,212	8.1	70,811	6.2
Public.....	884,792	100	342,793	38.7	183,087	21.3	137,962	15.6	98,919	11.2	66,655	7.5	50,866	5.7
Federal.....	404,032	100	144,015	35.6	85,016	21.0	64,562	16.0	48,593	12.0	34,669	8.6	27,197	6.7
State and municipal.....	480,760	100	198,778	41.3	103,071	21.4	73,400	15.3	50,326	10.5	31,986	6.7	23,169	4.8
Private.....	140,385	100	42,220	29.9	27,993	19.1	24,738	16.9	20,703	14.1	16,507	11.3	14,165	9.7
Article 129.....	48,606	100	18,530	38.2	10,568	21.8	8,162	16.8	5,547	11.4	3,449	7.1	2,310	4.8
Private initiative.....	97,769	100	23,699	24.2	17,425	17.8	16,576	17.0	15,156	15.5	13,058	13.3	11,855	12.1
Mixed.....	111,311	100	38,727	34.8	24,788	22.2	18,910	17.0	13,556	12.2	9,050	8.1	6,280	5.6

* Data from Dirección General de Estadística.

Article 27 of the Political Constitution of the United Mexican States as Revised to April 1, 1947¹

The ownership of the lands and waters comprised within the boundaries of the national territory is vested originally in the Nation, which has had, and has, the right to transmit title thereof to private persons, thereby constituting private property.

Private property shall not be expropriated except for reasons of public utility and subject to payment of indemnity.

The Nation shall at all times have the right to impose on private property such limitations as the public interest may demand, as well as the right to regulate the utilization of natural resources which are susceptible of appropriation, in order to conserve them and to insure a more equitable distribution of public wealth. With this end in view, the necessary measures shall be taken to divide up large landed estates; to develop small landed holdings in operation; to create new agricultural communities with the indispensable lands and waters; to encourage agriculture in general and to prevent the destruction of natural resources, and to protect property from damage to the detriment of society. Centres of population which at present either have no lands or water or which do not possess them in sufficient quantities for their needs, shall be entitled to grants thereof, which shall be taken from adjacent properties, the rights of small landed holdings in operation being respected at all times.

In the Nation is vested the direct ownership of all minerals or substances which, in veins, ledges, masses or ore-pockets, form deposits of a nature distinct from that of the earth itself, such as the minerals from which industrial metals and metaloids are extracted; deposits of precious stones, rocksalt and the deposits of salt formed by sea water; products derived from the decomposition of rocks, when subterranean works are required for their extraction; mineral or organic deposits of materials susceptible to utilization as fertilizers; solid mineral fuel; petroleum, and all solid, liquid or gaseous hydro-carbons.

In the Nation is likewise vested the ownership of the waters of the territorial seas, to the extent and within the limits fixed by International Law; of the waters of lagoons and estuaries which connect intermittently or permanently with the

1. The translation is based largely on the *Translation of the Political Constitution of the United States of Mexico* by Asociación de Empresas Industriales y Comerciales.

sea; of the waters of inland lakes of natural formation which are directly connected with streams having a constant flow; of the waters of rivers and their direct or indirect tributaries, from the source of their first permanent, intermittent or torrential waters to their outlet into the sea, lakes, lagoons or estuaries of national ownership; of the waters of streams having a constant or intermittent flow and of their direct or indirect tributaries, whenever the bed of the former, throughout the entire extent or part of same, forms National or two State boundary lines or passes from one State to another or crosses the National boundary line; of the waters of lakes, lagoons or estuaries whose beds, zones or banks are crossed by the boundary lines of two or more States or by the National boundary line or when the limit of the banks serves as the National boundary line or as the boundary between two States; of the waters of springs which rise on beaches, maritime zones, beds or banks of lakes, lagoons or estuaries of National ownership and of the waters extracted from mines. Water in the subsoil may be extracted freely by artificial works and be appropriated by the owner of the land, but whenever public interests so demand or other utilizations are affected, the Federal Executive is empowered to regulate its extraction and utilization and even to establish "prohibited zones," the same as for the other waters of National ownership. Any other waters not comprised in the foregoing enumeration shall be deemed as an integral part of the property through which they flow, but if located on two or more properties the utilization of such water shall be considered of public welfare and shall be subject to the rulings that may be passed by the States.

In the cases to which the two preceding paragraphs refer, the ownership of the Nation shall be inalienable and imprescriptible; and concessions shall only be granted by the Federal Government to private individuals or civil or commercial corporations organized in accordance with Mexican laws, on condition that regular works are established for the utilization of said resources and that all requisites set forth in the laws are complied with.

No concessions will be granted in the case of petroleum, or solid, liquid or gaseous hydro-carbons, and the respective Regulating Law will specify the form in which the Nation will carry out the exploitation of such products.

Legal capacity to acquire ownership of lands and waters of the Nation shall be governed by the following provisions:

I. Only Mexicans by birth or naturalization and Mexican corporations have the right to acquire ownership of lands, waters and their appurtenances, or to obtain concessions for working mines or for the utilization of waters or mineral fuel in the Republic of Mexico. The Nation may grant the same right to aliens, provided they agree before the Ministry of Foreign Relations to consider themselves as Mexicans in respect to such property, and bind themselves not to invoke the protection of their Governments in matters relating thereto; under penalty, in case of non-compliance, of forfeiture to the Nation of property so acquired.

Under no circumstances may foreigners acquire direct ownership of lands and waters within a zone of 100 kilometres along the frontiers and of 50 kilometres inland from the seacoast.

II. The religious institutions known as churches, irrespective of creed, may in no case acquire, hold or administer real property nor hold mortgages thereon; property so held at present, either directly or through third parties, shall revert to

the Nation, any person being authorized to denounce property so held. Strong presumptive proof shall suffice to declare the denunciation well founded. Places of public worship are the property of the Nation, as represented by the Federal Government, which shall determine which of them may continue to be devoted to their present purposes. Bishoprics, rectories, seminaries, orphan asylums and schools belonging to religious orders, convents and any other buildings built or intended for the administration, propagation or teaching of any religious creed shall at once become, by inherent right, the property of the Nation, to be used exclusively for the public services of the Federal or State Governments, within their respective jurisdictions. All places of public worship hereinafter erected shall be the property of the Nation.

III. Public or private charitable institutions for the rendering of assistance to the needy, for scientific research, or for the diffusion of knowledge, mutual aid societies, or organizations formed for any other lawful purpose may not acquire more real property than that actually required for their purpose and immediately or directly intended therefor; but they may acquire, hold or administer mortgages on real property provided the mortgage terms do not exceed ten years. Under no circumstances may such institutions be under the patronage, direction, administration, charge or supervision of religious orders or institutions, nor of ministers of any religious creed or of their followers, even though the former or the latter may not be in active service.

IV. Commercial stock companies may not acquire, hold or manage rural properties. Companies of this nature which may be organized to work factories or to engage in mining or in the petroleum industry or for any other purpose except agriculture may acquire, hold or manage lands, but only in the area strictly necessary for their buildings or services. This area shall be fixed in each particular case by the Executive of the Union or of the respective State.

V. Banks duly authorized to operate in accordance with the laws governing credit institutions may hold mortgages on urban and rural property as set forth in said laws, but they may not own nor manage more real property than that actually necessary for their direct purpose.

VI. With the exception of the corporations referred to in Clauses III, IV and V and the centres of population which, *de jure* and *de facto*, are in possession of communal holdings, have received grants or restitutions, or have been organized as centres of agricultural population, no other civil corporation may hold or manage real property or hold mortgages thereon, with the sole exception of the buildings intended immediately and directly for the purposes of the institution. The States, the Federal District and the Territories, and all the Municipalities shall enjoy full capacity to acquire and hold all the real property required to render public services.

The Federal and State laws shall determine within their respective jurisdictions those cases in which the occupation of private property shall be considered of public utility; and in accordance with the said laws the administrative authorities shall make the corresponding declaration. The amount fixed as compensation for the expropriated property shall be based on the sum at which the said property shall be valued for fiscal purposes in the cadastral or revenue offices, whether this value be that manifested by the owner or merely impliedly accepted by reason of the payment of his taxes on such a basis. The only point which shall be sub-

ject to expert opinion and to judicial determination is the increase in the value of the private property, on account of improvements, or its depreciation since the date of the last fiscal appraisal. The same procedure shall be followed in the case of objects whose value is not determined by the tax officers.

The exercise of the rights pertaining to the Nation by virtue of this article shall follow judicial process; but as part of this process and by order of the proper tribunals, which orders shall be issued within the maximum period of one month, the administrative authorities shall proceed without delay to the occupation, administration, auction, or sale of the lands or waters in question, together with all their appurtenances, and in no case may the acts of the said authorities be set aside until final sentence is handed down.

VII. The centres of population which, *de facto* or *de jure*, are subject to communal regime shall have legal capacity to enjoy common possession of the lands, forests and waters belonging to them, or which have been restored to them, or which may be restored to them.

All questions in regard to boundaries of communal lands, irrespective of the origin thereof now pending or which may arise hereinafter between two or more centres of population are of Federal jurisdiction. The Federal Executive shall take cognizance of such controversies and propose a solution to the interested parties. Should the latter agree therein, the proposition shall take full effect as a final decision and shall be irrevocable. Should they not be in conformity, the party or parties may enter proceedings before the Supreme Court of Justice of the Nation, without prejudice to immediate enforcement of the Presidential decision.

The law shall specify the procedure which shall govern the settling of such

one-fourth of the lands divided, or of one-fourth of said residents holding three-fourths of the land.

X. Centres of population which have no ejidos or are unable to have same restored to them due to lack of title, impossibility of identifying such lands, or because they have been legally alienated, shall be granted sufficient lands, forests, and waters to constitute same, in accordance with their requirements; in no case shall they fail to be granted the amount of land which they need, and for that purpose land shall be expropriated by the Federal Government and be taken from that adjacent to the villages in question. The area or individual allotment of land in the future should not be less than ten hectares of irrigated or humid land or, lacking these, the equivalent in other types of land as specified in the third paragraph of Section XV of this Article.

XI. For the purpose of carrying out the provisions of this Article and of the regulating laws to be issued, the following shall be established:

(a) A direct dependency of the Federal Executive, to take care of the application and enforcement of the agrarian laws.

(b) An Advisory Board, composed of five persons, to be appointed by the President of the Republic, and which shall discharge the duties assigned to it by the organic laws and regulations.

(c) Mixed Commissions, composed of an equal number of representatives of the Federal Government, the local Governments, and one representative of the peasants, to be appointed in the manner set forth in the respective regulating law. A Commission shall function in the Federal District and in each State and Territory, with the attributes set forth in said organic and regulating laws.

(d) Local executive committees for each of the centres of population which handle agrarian cases.

(e) Ejido offices for each of the centres of population which possess communal lands.

XII. Petitions for restitutions or grants of lands or waters shall be filed directly with the Governors of States and Territories.

The Governors shall refer the petitions to the Mixed Commissions, which shall consider the cases during a definitely fixed period of time and render an opinion. The State Governors will approve or modify the report of the Mixed Commissions and issue orders for immediate possession to be given covering the area of lands which they may deem proper. The cases shall then be referred to the Federal Executive for his decision.

When the Governors fail to comply with the provisions of the preceding paragraph within the definitely fixed period of time determined by law, the report of the Mixed Commissions shall be considered rejected, and the case shall be immediately referred to the Federal Executive.

On the other hand, should the Mixed Commissions fail to render a report within the definitely fixed time-limit, the Governors shall be empowered to grant possession of the amount of land which they deem proper.

XIII. The dependency of the Executive and the Agrarian Advisory Board shall report on the approval, rectification, or modification of the reports rendered by the Mixed Commissions, with the modifications made by the local Governments, and so report to the President of the Republic, in order that the latter, as supreme agrarian authority, may hand down a resolution.

XIV. Landowners affected by resolutions already handed down granting or restoring ejido lands or waters to villages, or who may be affected by future resolutions shall enjoy no ordinary legal right or recourse, and they cannot institute injunction proceedings [*amparo*].

Parties affected by grants are only entitled to petition the Federal Government to pay them the corresponding indemnity. This right must be exercised by the claimants within one year, reckoned from the date of publication of the respective resolution in the "Diario Oficial" of the Federation. No claim shall be admitted once this term has expired. The owners or possessors of agricultural or livestock holdings to which have been given, or in the future may be given, certificates of inalienability, may initiate injunction proceedings [*amparo*] against the deprivation or illegal agrarian affectation of their lands and waters.

XV. Mixed Commissions, local Governments and other authorities entrusted with agrarian proceedings may not, under any circumstances whatsoever, touch small agrarian properties in operation. They shall incur liability for violating the provisions of the Constitution if they make grants affecting small properties.

A small agrarian property [*pequeña propiedad*] shall be considered as that which does not exceed one hundred hectares of irrigated or first class humid land, or the equivalent in other types of land.

The equivalents shall be computed by allowing one hectare of irrigated land to be equal to two hectares of seasonal land, four hectares of good quality pasture land, and eight hectares of woodland or of arid pasture land.

Likewise, small agrarian properties shall include areas which do not exceed two hundred hectares of seasonal land, or tilable pasture land; one hundred-fifty hectares of land used for cultivation of cotton, if irrigated by river water or by pumping system; three hundred hectares devoted to growing banana, sugar cane, coffee, henequen, rubber, coconut trees, mangoes, citrus, guineas, vanilla, cacao, or fruit trees.

A small livestock property shall be considered as that which does not exceed the area necessary to support five hundred head of cattle [*ganado mayor*] or the equivalent in small livestock [*ganado menor*], according to the terms fixed by law, in accordance with the grazing capacity of the lands.

When, because of irrigation projects, drainage, or any other improvements made by the owners or possessors of a small agrarian property to which has been given a certificate of inalienability, the quality of the land is improved, this land cannot be the object of agrarian affectation even when, because of the improvements, the property surpasses the maximum specified in this section, provided the requirements of the law have been observed.

XVI. Lands which may be awarded inalienably shall be divided by specification at the time the Presidential resolution is put into effect, as set forth in the regulating laws.

XVII. The Congress of the Union and the State Legislatures within their respective jurisdictions, shall pass laws fixing the maximum extent of land for rural property; and measures governing the division of excess lands in accordance with the following bases:

(a). The maximum area of land which an individual or legally organized company may own in the Federal District and in each State and Territory shall be fixed.

(b) The excess of the area thus fixed shall be subdivided by the owner within a time-limit set by the laws of the respective locality; and these subdivisions shall be offered for sale on such conditions as may be approved by the respective Governments, in accordance with the said laws.

(c) If the owner shall refuse to make the subdivision, this shall be carried out by the local Government, by means of expropriation proceedings.

(d) The value of the lots shall be paid for in annual installments, sufficient to amortize the principal and interest, at a rate of interest not exceeding 3 percent per annum.

(e) Landowners are obliged to accept bonds of the local Agrarian Debt to guarantee payment of the property expropriated. With this end in view, the Congress of the Union will pass a law empowering the States to create their own Agrarian Debts.

(f) No subdivision of property will be allowed unless all agrarian requirements of adjacent communities have been satisfied. Agrarian cases shall be handled within a definitely fixed period whenever there exist projects for the subdivision of lands.

(g) Local laws shall provide for the organization of the family patrimony, determining the property of which it should consist and on a basis of its being inalienable and in no case subject to legal attachment or encumbrances of any kind.

XVIII. All contracts entered into and concessions granted by former Governments from and after the year 1876 which have resulted in the monopoly of lands, waters and natural resources of the Nation by a single individual or corporation are declared subject to revision, and the Executive of the Union is authorized to declare those null and void which imply serious detriment to public interests.

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INDEX



RURAL MEXICO

- Alfalfa: crop land devoted to, 244; index of production of, by years, 255
- Allec, Ralph, x
- Almonte, 23
- Altepetlalli, 76, 77
- Altitude: map of, 5; of state capitals, 30; variations in, 4
- Alvarado, Pedro de, 92
- Amecameca, shrine of, 463
- Amparo ("injunction"), with reference to expropriation of land, 134
- Amusgo, persons speaking, 56
- Ancient Mayan temples, photograph of, Pl. XVIII
- Anderson, Edgar, 625
- Anderson, R. K., 296, 311, 312, 314, 625
- Anti-Communist Center, as forerunner to Sinarquista movement, 486, 487
- Anti-Re-electionist party, description of procedures of, 109-10
- Anuarios de Peñafiel, 253
- Area: in crop land, by regions and states, 577; of land by use, 9, 575, 576; of Mexico, compared with continental United States, 28; of Mexico, compared with other countries, 578; of Mexico, hectares, 575, 576
- Areitos, 458
- Argentina: birth rate in, 389; crop yields in, 247; date of last population census in, ix; density of population of, 28, 578; estimate of population of, 24; excess of births over deaths in, 26; illiteracy in, 421; infant mortality in, 329; land area of, 578; number of inhabitants in, 37
- Army, status of, under Díaz, 110-11
- Article 27 of the Constitution of 1917, 116-22; objectives of, 116-17; principal sections of, 116, 117, 118, 122
- Article 123 of the Constitution, 217
- Arts and crafts, 272; in Paracho, 272; in Toluca, 272; in Uruapan, 272
- Asociación de Empresas Industriales y Comerciales, 117, 636
- Atole, preparation of, 307, 308
- Avila Camacho, Manuel, 128, 173, 285, 290, 430, 431, 432, 473, 481, 484, 518, 521, 538, 542, 558, 572, 625; photograph of, Pl. XXIII
- Ayudante municipal, 532
- Aztec, 440
- Azueta, Mariano, 625
- Bach, Federico, 625
- Baez Camarco, Gonzalo, 625
- Baja California Norte, 19, 20, 30, 31, 33, 34, 35, 37, 39, 41, 42, 57, 58, 128, 138, 164, 172, 178, 184, 185, 245, 260, 261, 262, 269, 287, 293, 294, 299, 301, 319, 327, 331, 353, 364, 365, 376, 418, 419, 422, 526, 527, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Baja California Sur, 19, 20, 30, 31, 33, 35, 37, 57, 58, 138, 178, 184, 185, 245, 261, 269, 287, 293, 294, 299, 319, 327, 364, 365, 376, 418, 419, 422, 511, 514, 515, 526, 527, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Bajío, 13; definition of, 490
- Balcárcel, 23
- Baldíos, surveying of, 98
- Balsas River, 15
- Bananas: crop land devoted to, 244; exports of, 601; index of production of oranges and, by years, 255; trends in production of, 253; value per hectare of, on ejidos compared with private holdings, 248-49; yield per hectare of, on ejidos compared with private holdings, 248
- Banco Nacional de Crédito Ejidal, 626; acknowledgment to, ix; organization and functions of, 191-203; *see also* Ejido Bank
- Bancroft, Hubert Howe, 626
- Bandelier, A. F. A., 626
- Bandelier, Fanny R., 641
- Barber, Charles H., 626
- Barefootedness: incidence of, by language spoken, 361, 363; map of, by states, 319; by regions, 318; by size of community, 317
- Barley: average per acre yield of, compared with certain other countries, 247; crop land devoted to, 244; trends in production of, 253; value per hectare of, on ejidos compared with private holdings, 248-49; yield per hectare of, on ejidos compared with private holdings, 248
- Baroïno, 52
- Barrio Lorenzot, Juan Francisco del, 626
- Basauri, Carlos, 50, 305, 626
- Basilica of Guadalupe, 460
- Basins of Central Mesa, description of, 12-15

- Bassols, Narciso, 626
 Baths, 295, 296
 Bauer, Walter, 644
 Bavispe River, 156
 Baz, Gustavo, 378, 379, 626
 Beals, Carleton, 626
 Beals, Ralph L., 270, 296, 303, 309, 310, 423, 424, 626
 Beans: crop land devoted to, 244; in the diet, 308, 315, 355; exports of, 601; index of production of other products and, by years, 255; trends in production of, 253; value per hectare of, on ejidos compared with private holdings, 248-49; yield per hectare of, on ejidos compared with private holdings, 248
 Beds, 291-92; in the Laguna region, 237; in rural dwellings, 291-92; types of, 291; types of, by states and regions, 606
 Beer, per capita consumption of, 312
 Bell, P. L., 626
 Bemis, Samuel F., 626
 Benavente Motolinía, Toribio de, 455, 456, 626
 Bennett, H. H., 55, 275
 Bennett, Wendell C., 626
 Bentley, Harold W., 386
 Berriozabal, 307
 Beteta, Ramón, 626, 627
 Biart, Lucien, 627
 Bidwell, Percy W., 627
 Bill, Alfred Hoyt, 627
 Birth rate, 25-26, 67; comparison of, with United States, 24; per 1,000 women in Mexico and United States according to age of the women, 392, 393
 Births: excess of, over deaths, compared with other countries, 25-26, 27; illegitimacy of, 387, 388; legitimacy of, 387, 388
 Bishop of Michoacán, 96
 Blakeslee, George Hubbard, 627
 Blanco Macías, Gonzalo, 627
 Blasco Ibáñez, Vicente, 627
 Blasio, José L., 627
 Blom, Frans, 627
 Bolivia: date of last population census in, ix; density of population in, 578; illiteracy in, 421; land area of, 578; number of inhabitants in, 578
 Bonilla y Segura, Guillermo, 435, 438, 627
 Booth, George C., 627
 Bosques, Gilberto, 627
 Braceros ("farm hands"), 270; photograph of, Pls. IX and X
 Braden, Charles Samuel, 627
 Brazil: density of population in, 28, 578; illiteracy in, 421; land area of, 578; life-expectancy in, 333; life-expectancy in Federal District of, 333; number of inhabitants in, 24, 578; political and social changes in, xiv; population engaged in agriculture in, 37
 Bread, number of inhabitants eating wheat, 306, 609
 Brenner, Anita, 455, 627
 Brinsmade, Robert Bruce, 627
 Buddhists, number of, by size of community, 454
 Bulnes, Francisco, 627
 Bureau of Rural Hygiene and Social Medicine, 349, 351; amount of funds allotted by, for health services, 353; number of health agencies sponsored by, 352
 Burkardt, 23
 Burros, 9; number of, on ejidos, 249, 250; total number of, 249
 Bustamante, Miguel E., 312, 627, 628
 Busto, Emiliano, 23, 628

Caballería, 92-93
Cabecera de municipio, 532
 Cabrera, Luis, 75, 103, 104, 127, 628
 Cacaohatán, health services in, 353
Cacique, 83
 Calderón de la Barca, Frances Erskine, 628
 Calxico, California, 196
 Callahan, James M., 628
 Callcott, Wilfrid Hardy, 628
 Calles, Plutarco Elías, 114, 124, 125, 127, 492, 496, 572, 628; photograph of, Pl. XXIII
Calpulalli, 77, 78
Calpulli, 76
 Calvo, José, 628
 Calvo de la Torre, José, 641
 Calzones, 319; and Spanish influence, 356
Cambujo, 52
 Camohmila: location of, 451; methods of procedure in, 451; objectives of, 451; as a rural reconstruction center sponsored by International Y.M.C.A., 451-53
 Campeche, 8, 18, 19, 20, 30, 31, 33, 35, 37, 57, 58, 138, 178, 179, 184, 185, 186, 245, 261, 262, 264, 269, 287, 291, 293, 294, 299, 319, 327, 336, 364, 365, 376, 418, 419, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
Campesinos, 176

- Campos, Rubén M., 628
- Canada: citizens of, in Mexico, by size of community, 585; crop yields in, 247; nationals of, entering and leaving Mexico, 62; population from, by citizenship, 61
- Candelilla*: areas producing, 266-67; use of, 266, 267
- Carbajal, Francisco S., 113
- Cárdenas, Lázaro, 127, 128, 132, 145, 146, 148, 218, 219, 496, 572, 628; photograph of, Pl. XXIII
- Carillo, Alejandro, 628
- Carlson, Fred A., 628
- Carmelites, 96
- Carpio, Fabian, 490, 628
- Carranza, Venustiano, 113, 114, 122, 123, 124, 496
- Carrasco, Pedro, 303, 626
- Casa de hacienda*, 101; labor of peons at a, 106
- Casa del pueblo, la*, 405
- Casas Grandes, Mormon settlements in vicinity of, 155-56
- Casas solas* ("single houses"), 287-89
- Caso, Alfonso, 628, 629
- Caso, Antonio, 629
- Caste system, development of, 51
- Castile, towns of, as landholding bodies, 80
- Castizo*, 52
- Castro, L., 23
- Categorías políticas*, 40-43, 217
- Catholic church superimposed on pre-Columbian structure, photograph of, Pl. XIX; *see also* Church; Religion
- Catholics, number of, by size of community, 454
- Cattle: exports of, 601; hoof-and-mouth disease in, 251-52; imports of, 601; number of, on ejidos, 249; total number of, 249; trends of production in, 254; *see also* Livestock
- Ceballos, N., Roque J., 629
- Celaya, loans to ejidatarios in, 196
- Celibacy, lack of, among priests, 478
- Census: agrarian, 220; agriculture and livestock (1940), ix; ejido (1940), ix; national housing (1939), ix; political categories in, 40; relative completeness of, 25, 36
- Central Mca, 10, 11, 12, 13, 15, 86; land area in, 32; rural population in, 32
- Central plateau, description of, 10-13
- Chalma, shrine of, 463
- Chamber of Deputies, 522
- Chamizo*, 52
- Chan Kom: attitudes toward adultery in, 385; case descriptions of illnesses in, 342-44; importance of *compadrazgo* in, 399; uses of literacy in, 423
- Chandos, Dane, 629
- Chapingo, 428
- Chaplin, Charlie, 495
- Chapultepec, Las Lomas de, 546
- Charal, in the diet, 313
- Charles IV, 96
- Chase, Stuart, 629
- Chatino, persons speaking, 56
- Chávez, Eduardo, 629
- Chávez Orozco, Luis, 629, 631
- Cherán: diets in, 309-11; education in, 423-24; migration to United States from, 270
- Chevalier, Michel, 629
- Chewing gum, 18
- Chiapas, 16, 19, 20, 30, 31, 33, 34, 35, 37, 39, 42, 56, 57, 58, 90, 128, 138, 175, 178, 184, 185, 215, 245, 261, 264, 269, 287, 293, 294, 299, 319, 324, 327, 336, 353, 364, 365, 366, 376, 377, 417, 418, 419, 524, 526, 528, 531, 536, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612; wives and children of ejidatarios sorting coffee in the state of, photograph of, Pl. VIIA
- Chichen-Itza, Yucatán, photograph of ancient Mayan temples at, Pl. XVIII
- Chichimeca, persons speaking, 56
- Chickpeas: crop land devoted to, 244; exports of, 257, 601; index of production of other products and, by years, 255; trends in production of, 253
- Chicle, 58; areas producing, 264, 265; exports of, 18, 265; harvesting of, 265
- Chicle workers: living conditions of, 265; source of, 265; wages of, 265
- Chihuahua, 14, 19, 20, 30, 31, 32, 33, 35, 37, 49, 57, 58, 63, 110, 111, 134, 138, 155, 156, 158, 159, 166, 167, 178, 184, 185, 245, 261, 267, 269, 287, 293, 294, 299, 317, 319, 327, 364, 365, 366, 367, 376, 418, 419, 422, 526, 528, 529, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Chile (country): birth rate in, 389; crop yields in, 247; density of population in, 28, 578; estimate of population in, 24; excess of births over deaths in, 26; illiteracy in, 421; infant mortality in,

- 329; land area of, 578; life-expectancy in, 333; number of inhabitants in, 578; population engaged in agriculture in, 37
- Chile (product): in the diet, 307, 308, 355; index of production of other products and dry, by years, 255; trends of production in green and dry, 253
- China: citizens of, in Mexico, by size of community, 585; nationals of, entering and leaving Mexico, 62; population from, by citizenship, 61
- Chinanteco, persons speaking, 56
- Chol, persons speaking, 56
- Cholula, 456, 457, 466
- Chontal, persons speaking, 56
- Church: accumulation of wealth by, 93-97; care of, by village families, 467; construction of, 456, 466-67; decoration in, 467; edifice, 466-67; factors associated with legislation against, 473-80; general limitation on authority of, 472; and Indian labor, 466; as an institution, 454-83; as an instrument of conquest, 455; legislation against, 471-80; present outlook for, 481-83; prohibition on administering charitable or research institutions by, 471; religion and the rural, 454-83; restriction of number of priests, 472; restrictions on the holding and control of real estate by, 471, 617-18; restrictions on ministers' freedom of expression in, 472; widespread distribution of, 466
- Church membership: Buddhist, Catholic, Hebrew, Protestant, 454
- Church properties: accumulation of, 93-96, 474; amount of, 96; commercial enterprises as, 95; from fees for ecclesiastical ceremonies, 95; from gifts, 94; from Indian labor, 95-96; large concentrations of land in, 96; nationalization of, 97; restrictions on, 119; sources for acquiring, 94; as sources of haciendas, 93-96; from tithes and alms, 95
- Citizenship, 60-61, 585; defined, 524
- Ciudad ("city"), 41
- Ciudad Juárez, 110, 111, 166, 386, 429
- Ciudad Obregón, 207
- Clans, 76, 77
- Clark, Marjorie Ruth, 629
- Clavigero, Francisco Saverio, 629
- Clergy: commercial enterprises of, 95; immunity of, 94; privileges of, 94; use of Indian labor by the, 95-96
- Climate, 6, 12, 31
- Climatic zones, 6
- Cline, Howard F., 629
- Clothing, 316-25; cost of women's, 324; in the Laguna region, 237; laundering of, 296, 297; men's, 319, 320; regional distribution of footgear worn, by type, 317-18; regional examples, 320-25; types of dress, 316, 317; women's, 320
- Coahuila, 14, 19, 20, 30, 31, 32, 33, 34, 35, 37, 41, 57, 58, 128, 134, 138, 178, 184, 185, 215, 216, 245, 261, 267, 269, 287, 293, 294, 299, 319, 327, 364, 365, 376, 418, 419, 429, 526, 528, 529, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Coastal lowlands, 16-18
- Coatzacoalcos, Veracruz, rainfall in, 17
- Coffee: crop land devoted to, 244; exports of, 257, 601; index of production of other products and, by years, 255; trends in production of, 253; value per hectare of, on ejidos compared with private holdings, 248-49; yield per hectare of, on ejidos compared with private holdings, 248
- Colima, 19, 20, 30, 31, 33, 35, 37, 57, 58, 138, 178, 184, 185, 245, 261, 266, 269, 287, 293, 294, 299, 319, 327, 353, 364, 365, 376, 418, 419, 422, 526, 528, 531, 575, 576, 577, 578, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Collective ejido, 207-14; compensation for tasks performed on, 209; distribution of profits on, 209-11; distribution of tasks on, 207-9; essential features of, 207-8; organization of, 208; personnel on, 208, 209; *see also* Ejidos
- Collective farming: advantages of, 211-12; a case description of the Laguna region, 215-39; disadvantages of, 212-14; most important areas of, 215, 216
- Collier, John, 629
- Colombia: birth rate in, 389; density of population in, 28, 578; estimate of population in, 24; excess of births over deaths in, 26; land area of, 578; life expectancy in, 333; number of inhabitants in, 578
- Colonization, 154-71; extent of, 1916-43, 168-71, 590; of foreign agricultural colonies, 155-68; functions of Department of, 168; by Mennonites, 159-64; by Mormons, 155-59; by North American colonists, 155; by Russian Molo-

- kange, 164-66; of Sinarquistas, 511-16; by Spanish refugees, 166-68
- Comal*, 304, 356
- Comisario*, 532
- Commerce: engaged in, by clergy, 95; persons employed in, 64
- Common-law marriage; *see* Free union; Marriage
- Communication and transportation: lack of facilities for, 7-9, 535-37; persons employed in, 64
- Compadrazgo* ("godparenthood"), 398-400; *compadres*, 398; functions of, 398; importance of *compadrazgo* in isolated areas, 398-99; *madrina* ("godmother"), 398; *padrino* ("godfather"), 398; tendency to break down with urbanization, 399-400
- Composición*: definition of, 82, 84; and the *encomienda*, 92
- Composition of the population, 50-71
- Conclusion, 562-72
- Confederación Nacional Campesina, 629
- Congregaciones*, 41, 115; definition of, 42
- Congreso de la Unión, 23
- Conquest, Spanish, 21-22, 152, 355
- Constitution, Article 27 of (complete translation), 616-22
- Constitution of 1857, 85, 97, 116
- Constitution of 1917, xviii, 116-23; and the agrarian problem, 120-21; Article 27 of, 116-17; objectives of, 116-17
- Consumers' co-operative stores, 238
- Contreras Arias, Alfonso, 3, 629
- Convent of La Merced, gifts to, 95
- Convent of San Francisco, alms to, 95
- Cook, Katherine M., 629
- Cooke, Sherburne F., 629
- Co-operatives: consumers', in collective ejidos, 238; in San Pablo del Monte, 445-47
- Co-ordinator of Inter-American Affairs, 629
- Coquito de aceite*: areas producing, 266; use of, 266
- Cora, persons speaking, 56
- Coras, living at Indian-colonial level, 366-67
- Corn: average per acre yield of, compared with certain other countries, 247; as basic element in diet, 304; crop land devoted to, 244; gruels made from, 307, 309, 355; imports of, 601; index of production of other products and, by years, 255; preparation of tortillas from, 304; as principal crop, 244; production of, during Díaz regime, 252; trends in production of, 253; value per hectare of, on ejidos compared with private holdings, 248; yield per hectare of, on ejidos compared with private holdings, 248; grinding of, on metate, photograph of, Pl. XV
- Corona Enríque, 629
- Corral, Ramón, 109, 111, 113
- Corridos* ("popular songs"), 360
- Cortés, Hernando, 21, 53, 91, 92, 94
- Cossío, José L., 629
- Costa chica*, Negroes in, 51
- Costa Rica: birth rate in, 389; density of population in, 578; excess of births over deaths in, 26; infant mortality in, 329; land area of, 578; number of inhabitants in, 578
- Cotton: crop land devoted to, 244; exports of, 257, 601; index of production of henequen, sugar cane, and, by years, 255; production of, during Díaz regime, 252; trends in production of, 253; value per hectare of, on ejidos compared with private holdings, 248-49; yield per hectare of, on ejidos compared with private holdings, 248
- Courtship, 395-96
- Covarrubias, José, 630
- Covarrubias, Miguel, 630
- Cowan, Florencia Hausen, 630
- Cows: grades of, on ejidos and private holdings, 250-51; number of, on ejidos and private holdings, 250
- Coyote*, 52
- Coyote-Mestizo*, 52
- Cravioto, René O., 630
- Cravioto B., René, 305, 630
- Credit, ejido, 191-203, 206, 211
- Credit societies, 200-203, 206, 211
- Creelman, James, 109, 630
- Creoles, 51
- Crist, R. E., 630
- Cristero* rebellion, 506; cause of, 475; sinarchism as a sequel to, 492, 521
- Crop land, 9, 10, 575, 576, 577; humid, 10, 577; irrigated, 10, 577; seasonal, 10, 577
- Cross, as a religious symbol; *see* Religious symbol
- Crow, John A., 630
- Cuadros Caldas, José, 630
- Cuahtémoc, 159, 160
- Cuba: citizens of, in Mexico, by size of community, 585; density of population in, 28, 578; illiteracy in, 421; land area of, 578; nationals of, entering and leaving Mexico, 62; number of inhabitants in, 578; population from, by citizenship,

- 61; population engaged in agriculture in, 37
- Cuernavaca, 386
- Cuevas, Mariano, 630
- Cuicateco, persons speaking, 56
- Cullen, Charles, 629
- Cultural missions: origin of, 405; as traveling normal schools, 406; as traveling teachers' institutes, 405; *see also* Rural cultural missions
- Curandera* ("witch doctor"): case description of treatment by, for evil eye or witchcraft, 342; cost of services of, 363; description of, 341; techniques of, 341, 342
- Cushing, S. W., 630
- Democracy: lack of education and, 537-38; the *mordida* and, 545-54; the official one-party system and, 539-45; problem of, 535-55; social and cultural isolation and, 535-37; the social heritage and, 538-39
- Denouncing of village lands, 82-84
- Dentists, in rural and urban areas, 345
- Departamento Agrario, ix, 636; redistribution of lands under, 135-36; *see also* Agrarian Department
- Departamento de Asuntos Indígenas, 426, 427, 636
- Departamento Autónomo de Publicidad y Propaganda, 636
- Department of Agricultural Services of the Fide Rural 265

- celebration, 464-65; photograph of, in Tepoztlán, Pl. XXI
- Finca*, in Chiapas and Tabasco, 42, 90, 175
- Fish, consumption of, 309
- Flandrau, Charles Macomb, 383, 384, 631
- Flores Muñoz, Gilberto, 631
- Flümcir, Bodo von, 23
- Flynn, Errol, 495
- Foglio Miramontes, Fernando, 631
- Foreign nationalities, number of persons by citizenship, 61
- Foreign-born population, 58-63, 584, 585; colonization by, 155-68
- Forests: destruction of, 276-79; land area in, 9, 575, 576
- Foreward, xiii-xix
- Foster, A., 631
- France: citizens of, in Mexico, by size of community, 585; nationals of, entering and leaving Mexico, 62; population from, by citizenship, 61
- Franck, Harry A., 631
- Free union (common-law marriage): per cent living in, of all with marital relationships, 375-78; relative stability of, 382-84; *see also* Marriage
- Freedom: individual, in the Laguna region, 239; personal, as a major accomplishment of the Revolution, 571-72; of the press, 572; of speech, 572
- Freeman, Joseph, 631
- Fretz, J. Winfield, 160, 631
- Frijoles*, in the diet, 307, 308
- Fröebel, 401
- Fruits, index of production of oranges and bananas, by years, 255
- Fuero*: definition of, 94; ecclesiastical immunity through, 94
- Fulton, Maurice Garland, 632
- Fundo legal* ("town site"), 80, 104
- Gachupines*, 51
- Galindo y Villa, Jesús, 631
- Galpin, C. J., 331, 642
- Gamio, Manuel, x, xix, 24, 267, 270, 271, 306, 308, 322, 324, 325, 339, 356, 357, 380, 381, 382, 400, 455, 457, 458, 461, 462, 464, 465, 478, 479, 482, 534, 631, 632, 638, 643
- Gante, Pedro de, 401, 479
- García, Genaro, 21, 630
- García Cubas, 23
- García Granados, Ricardo, 632
- Garlic: exports of, 601; imports of, 601
- Garner, J. L., 627
- General assembly, of the ejido, 187-88
- Genin, Auguste, 632
- Geographic factor, relative to agricultural production, xv, xvi
- Geographical divisions, 10-20
- Geographical environment, 3-20; characteristic features of, 3-10; natural geographical divisions, 10-19
- Germany: citizens of, in Mexico, by size of community, 585; nationals of, entering and leaving Mexico, 62; population from, by citizenship, 61
- Gill, Mario, 486, 493, 499, 514, 515, 632
- Goats: imports of, 601; number of, on ejidos, 249, 250; total number of, 249
- Godparenthood, 398-400
- Goldschmidt, Alfonso, 632
- Gómez, Francisco Vásquez, 109
- Gómcz, Marte R., 632
- Gómcz de Cervantes, Gonzalo, 632
- Gómez Esparza, José, 632
- Gómez Morín, Manuel, 632
- Gómez Robleda, José, 632
- González, Abraham, 110
- González, Tomás, 505
- González Bonilla, Luis Arturo, 632
- González Gallardo, Alfonso, 632
- González Garza, Federico, 632
- González Garza, Roque, 113
- González Roa, Fernando, 630, 632
- González Sánchez, Gildardo, 504, 521
- Good Neighbor Policy, xix
- Government, 523-59; agencies of, federal and state, 534-35; democratic functioning of, and the *mordida*, 545-54; and electoral procedure, 555-59; employees, salaries of, 551; financing of municipal, 554; and illiteracy, 537-38; of isolated communities, 535-37; legal basis for municipal, 526-27; Mexico as a federal republic, 523; municipal, 524-27, 530-34; obstacles to democratic functioning of, 535-59; one-party system of, 539-45; organization of federal and state, 523; three branches of, 523
- Grabill, Wilson H., 392, 393, 632
- Great Britain: citizens of, in Mexico, by size of community, 585; nationals of, entering and leaving Mexico, 62; population from, by citizenship, 61
- Green, Philip Leonard, 632
- Gregg, Josiah, 632
- Grijalva River, 16
- Grubb, Kenneth G., 625
- Gruening, Ernest, 21, 50, 87, 88, 109, 296, 402, 455, 456, 460, 476, 477, 632
- Guadalajara, 273, 276, 379

- Guadalupe; *see* Virgin of Guadalupe
 Guadalupe Valley, 164; Russian colony at, 164
 Guanajuato, 13, 19, 20, 30, 31, 33, 35, 37, 57, 58, 92, 138, 178, 184, 185, 245, 260, 261, 268, 269, 287, 293, 294, 299, 319, 327, 328, 336, 353, 364, 365, 376, 418, 419, 422, 424, 485, 486, 488, 511, 512, 514, 515, 521, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
 Guatemala: citizens of, in Mexico, by size of community, 585; density of population in, 28, 578; land area of, 578; nationals of, entering and leaving Mexico, 62; number of inhabitants in, 578; political and racial changes in, xiv; population from, by citizenship, 61
 Guaymas (report of), 158
 Guerra Cepeda, Gilberto, 633
 Guerrero, 13, 15, 16, 19, 20, 30, 31, 33, 35, 37, 51, 57, 58, 138, 178, 179, 184, 185, 245, 261, 264, 269, 287, 293, 294, 299, 301, 319, 327, 336, 364, 365, 366, 376, 379, 417, 418, 419, 448, 524, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
 Gulf Coast, rainfall in, 8
 Gunther, John, 633
 Guzman, in the diet, 313
 Gutiérrez, Esteban, 113
 Gutmann, Enrique, 631
 Guzmán, Martín Luis, 633
 Guzmán Valdivia, 456, 467, 496
 Hemen, role of, in curing diseases, 342-43
 Hacendados: as absentee landlord, 101; attitude of, toward the agrarian program, 143-44; attitude of, toward the Decree of 1915, 116; as compared with owner of the rancho, 153; definition of, 100
 Hacienda, 90-107; administration of, 100-102; appeal of, to hacendado, 100; as a complete settlement, 100; cost of living on, 107; definition of, 90, 175-76; derived from the *encomienda*, 91-92; ecclesiastical properties in, 93-99; economic bondage of peons on, 90; economic self-sufficiency of, 99-100; from entailed estates, 93; growth of, 90-99; laboring force of, 102, 106; methods of acquiring, 100; methods of remuneration on, 106-7; organization of, 99-107; origin of, 91; personnel of, 102; schools on, 103; sharecroppers on, 105; struggle of, with landholding village, 107, 152; system, 106, 107; *tienda de raya* on, 103-4; wages paid on, 107
 Hacienda La Gavia, 105
 Hackett, Charles Wilson, 633
 Hague Colony, Mennonites at, 159
 Haiti: density of population in, 578; land area of, 578; number of inhabitants in, 578
 Harris, Margaret, 633
 Harvard University, xiii
 Hatch, D. Spencer, 451, 452, 453, 633; photograph by, Pl. XXI
 Hatcher, Evelyn, 309, 310, 626
 Hayner, Norman S., 397, 633
 Health: and lack of physicians in rural areas, 344-49; levels of living affecting, 326; and mortality, 326-54; plans for betterment of, 346-49; programs on ejidos, 349-53; services in Laguna region, 235-37; *see also* Mortality rates
 Heibel, A., 633
 Henequen, 18; crop land devoted to, 244; exports of, 257, 601; index of production of cotton, sugar cane, and, by years, 255; trends in production of, 253
 Henequeneros de Yucatán, 195; membership in, 216; operation of, 216
 Hermosa, 23
 Hernández Topete, Diego, 508
 Herrera Gutiérrez, Alfonso, 633
 Herring, Hubert C., 368, 556, 568, 633, 640
 Hewes, L., 633
 Hewett, Edgar Lee, 633
 Hidalgo, 12, 19, 20, 30, 31, 33, 35, 37, 57, 58, 138, 178, 179, 184, 185, 242, 245, 261, 265, 269, 286, 287, 293, 294, 299, 319, 324, 327, 335, 353, 364, 365, 376, 377, 418, 419, 422, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612; ejidatarios in, photograph of, Pl. V,B
 Hidalgo, Miguel, 459, 474, 480, 481
 Higareda, 508
 Higbee, Edward C., 633
 Highways, expenditures for, 8; lack of, 9, 15-16
 Hinojosa Ortiz, Manuel, 633
 Hobart, Alice Tisdale (Nourse), 633
 Hogs; *see* Swine
 Homicides, 65

- Honduras: density of population in, 578; land area of, 578; number of inhabitants in, 578
- Hoof-and-mouth disease, outbreak of, 567
- Horgan, Paul, 632
- Horses: number of, on ejidos, 249, 250; total number of, 249
- Hospitals: on collective ejidos, 350; construction program of, 354; in the Laguna region, 235
- Household conveniences, 289-301; baths, 295, 296; beds, 291, 292, 606; drinking water, 292-95, 607; heat and light, 292; kitchen equipment, 290, 291; laundry equipment, 296, 297; radios, 300, 301; sewage disposal, 297; sewing machines, 298-300; telephones, 301, 608
- Housing, 285-303; attitudes concerning, 301-3; conveniences in, 289-301; lack of improvement in, 571; in the Laguna region, 237; types of dwellings, 285-89, by states and regions, 603, 604, 605; photographs of, Pls. XII, XIII, and XIV
- Howells, W. W., 633
- Huaraches, wearers of: by language spoken, 361, 363; by regions, 318; by size of community, 317
- Huasteco, persons speaking, 56
- Huerta, Victoriano, 113
- Huerta Vivanco, Angel, 379
- Huichol, persons speaking, 56
- Huicholes, living at the Indian-colonial level, 366, 367
- Humboldt, Alexander von, 23, 633
- Humphrey, Norman Deymond, 633
- Huts and hovels, 45, 286, 287; description of, 286, 287; number of, by states and regions, 604, 605; per cent they are of all dwellings, 287; persons living in, by states and regions, 603; in Oaxaca, photograph of, Pl. XII,B; in Yucatán, photograph of, Pl. XII,A
- Illegitimacy of births: by order of birth, 387; among servant class in city, 388; in 265 municipalities, 387
- Illiteracy, 416-24; according to age groups, 420-21; downward trend of, 569; incidence of, in total population, 417; by minor civil divisions, 418-19; national campaign against, 421-22, 569; as an obstacle to national democracy, 417, 537-38; progress of campaign against, 422; by size of community, 418, by states and regions, 418; trends in, 420-21; in various other countries of Latin America, 421
- Immigration, 26-28, 61-63
- Imports, of agricultural products, 256, 257, 601
- Index of contemporary Indian-colonial culture, 360-71; cultural characteristics comprising, 360-62; population living at Indian-colonial level, 362-69
- Index of volume of agricultural production, by years, 255
- Indian: cultures, fusing of, with Spanish culture, 355-71; diet, 314, 316, 355; housing, 302; labor, use of, 81-82, 95-96; languages, persons speaking, 55-56, 582, 583; population, pre-Conquest, 21-22; problem, the, 52, 53, 57; schools, 426-28; status of the, 52; costume for the annual feather dance in Oaxaca, photograph of, Pl. XXII
- Indianism, 355-71; earmarks of, 360-62; incidence of, compared with illiteracy, 366, 367; index of contemporary Indian-colonial culture, 360-71; Indian-colonial level of living, 355; Indian village markets as an element of, 357-60
- Individual ejido, 203-7; description of, 203-7; difficulties of, 204-5; farm machinery on, 205; number of, 203
- Industrial production, index of, by years, 273, 274
- Industrial workers, 63, 64, 568
- Industrialization, 568
- Industry, persons employed in, 64
- Infant mortality, 328-30; compared with other Latin-American countries, 329; decline of, 330; by states and regions, 611
- Inflation, since World War II, 261, 569
- Inhabitants; *see* Population
- Inman, Samuel Guy, 633
- Instituto Federal de Capacitación del Magisterio, 410
- Instituto Politécnico Nacional, 637
- Inter-American Indian Institute, 478
- Irrigation: amount of land under, 172-73, 576, 591; funds allotted for, by years, 172; land made available through, 171-72, 591; persons benefited by, 591; in the pre-Columbian period, 77; projects, 171-73
- Irrigation Commission, National: changed to Secretariat of Hydraulic Resources, 172; organization of, 172
- Islands, Balearic and Canary, *encomiendas* in, 91
- Isolated farmsteads, definition of, 43-44
- Isolation: geographical, 7-9, 535; social and cultural, 535-37

- Italy: citizens of, in Mexico, by size of community, 585; nationals of, entering and leaving Mexico, 62; population from, by citizenship, 61
- Iturbide, Augustín de, 97, 481
- Ixcatepec, Morelos, 465
- Ixtaccíhuatl, 12
- Ixtle*: areas of production of, 265; use of, 265, 266
- Jacal*, in Yucatán, photograph of, Pl. XII, A
- Jacales* ("huts and hovels"): description of, 285; number of, by states and regions, 603; persons living in, by states and regions, 603; of cornstalks in Oaxaca, photograph of, Pl. XII, B; of ejidatarios in Tamaulipas, photograph of, Pl. XIII, A; of an ejido at Los Mochis, Sinaloa, photograph of, Pl. XIII, B
- Jalisco, 13, 14, 19, 20, 30, 31, 33, 35, 37, 57, 58, 138, 178, 184, 185, 245, 261, 268, 269, 287, 293, 294, 299, 319, 327, 364, 365, 366, 367, 376, 396, 418, 419, 488, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- James, Earle K., 634
- James, Preston, 3, 4, 8, 12, 13, 634
- Japan: citizens of, in Mexico, by size of community, 585; nationals of, entering and leaving Mexico, 62; population from, by citizenship, 61
- Jay, William, 634
- Jefe político*, during the Díaz regime, 524, 525
- Jenkins, Joyce, 634
- Jesuits: expulsion of, 96-97; gifts to, 95
- Jiménez, Ejido Credit Society of, 233, 234
- Johnson, Frederick, 634
- Jones, Chester L., 634
- Jones, Robert C., 267, 268, 634
- Jorgensen, Albert N., x
- Juárez, Benito, 83, 97, 153, 174, 477, 481
- Kibbe, Pauline R., 498, 634
- King, Rosa E., 634
- Kirk, Betty, 498, 501, 540, 634
- Kluckholm, Frank L., 634
- Kubler, George, 634
- Labor legislation, 568
- Labor's benefits from the Revolution, 568
- Lacandonese, clothing of, 324
- Lagos Chazaro, Francisco, 113
- Laguna region: agricultural production of ejidos in, 231-35; a case description of, 215-39; consumers' co-operative stores in, 238; as a cotton-producing area, 128; decree authorizing expropriation of, 218, 219; diseases in, 236; expropriation of land in, 239; health service in, 353; housing in, 237, 302, 571; individual freedom in, 239; irrigable land in, 220, 221; location of, 128; organization and function of collective ejidos in, 224-31; problems confronting, 220-22; prostitution in, 236; purchasing power of residents in, 238, 239; radios in, 237; recreation in, 237, 238; schools in, 237; social services in, 235-39; standards of living in, 235-39; success of collective ejidos in, 231-39; types of farming equipment in, 226
- Lakes, Chapala and Pátzcuaro, 309
- Land: colonization of (1916-43), 169-71; elevation of, and major climatic zones, 6; monopoly under Díaz, 98-99; utilization, 9-10, 575, 576, 577
- Land redistribution, 124-51; critical discussion of, 144-51; eligible recipients of, 130-33; hectares distributed, 126; individuals granted preferences in distribution of, 137; number of persons receiving under, system, 126; procedure for granting to villages, 135-36; result of, program, 176-81; rules of tenure for ejido, 139-43; by size of allotments, 125; size of grants, 136-37; sources of land for, 133-35; types of land redistributed, 139, 589
- Land tenure, on ejidos, 139-43
- Landholding village, 75-89, 152
- Landholdings: distribution of, 178, 179; with more than 1,000 hectares, 593; number of, 178, 592; present distribution of, 173-79; size of, 178, 592; types of private, 173-76
- Lanks, H. C., 634
- La Paz, Ejido Credit Society of, 234
- La Purísima, Ejido Credit Society of, 234
- Las Casas, Bartolomé de, 402, 470, 479, 634
- Lascurain, Pedro, 113
- Las Vegas, 386
- Latifundia*, 120
- Latin America, vii, ix, xiv, 24, 26, 28, 326, 329, 333, 421, 569, 578
- Latin-American Confederation of Labor, 552

- Latter Day Saints, Church of Jesus Christ of, 157; *see also* Mormon colonies
- Lavalle Urbina, María, 524
- Lazcano Romero, José, 634
- Lefevre, E., 23
- Legitimacy of births, 387, 388
- Leighton, George, 627
- León, Guanajuato, birthplace of sinarchism, 485, 521
- "León massacre" (of Sinarquistas), 521
- Leonard, Olcn, 634
- Lerdo de Tejada, 23
- Levels of living; *see* Standards and levels of living
- Lewis, Oscar, 634
- Ley fuga*, 525, 571
- Life-expectancy, 332, 333; in Brazil, 333; in Caracas, Venezuela, 333; in Chile, 333; in Columbia, 333; of females, 332; in Lima, Peru, 333; of males, 332; trend in, 333
- Liga de Agrónomos Socialistas, 217, 219, 227, 229, 634
- Liga de Comunidades Agrarias y Sindicatos Campesinos de Chiapas, 634
- Ligul, 342
- Ligutti, L. G., 634
- Limes, exports of, 601
- Line-village, definition of, 48
- Linton, Ralph, 634
- Lira López, Salvador, 243, 264, 634
- Literacy, 416-24; as a measure of educational attainment, 416; uses of, in Chan Kom, Yucatán, 423; *see also* Illiteracy
- Livares, Duke of, 477
- Livestock: attempts to improve quality of, 251; on ejidos, compared with private holdings, 250; exports of, 601; hoof-and-mouth disease among, 251; imports of, 601; keeping of, in villages, 48; number of, on ejidos, 253; production of, on ejidos, 249-52; quality of, 250, 251; trend in production of, 254
- Livingston, Arthur, 627
- Loans: made to ejidatarios, 197; types of, 193; volume of (1936-45), 194; *see also* Agricultural credit
- Lobo, 52
- Locality groups, according to size, 43-46; major political categories of, in census of 1940, 38-43
- Loeza, Pablo, 508
- Lombardía, 128; consumers' co-operative stores in, 238; housing in, 302, 571
- Lombardo Otero, Rosa María, 634
- Lombardo Toledano, Vicente, 552, 635
- Loomis, C. P., 634, 635
- López, Efrain, 497
- López, J. Jesus Sam, 508
- López y Fuentes, Gregorio, 635
- López Rosado, Diego C., 635
- López Zamora, Emilio, 635
- Lorenzana, Alvaro de, gifts to clergy from, 94
- Los Mochis: consumers' co-operative stores in, 238; housing in, 302, 571; location of, 128; as a sugar-cane-producing area, 128, 215
- Loyo, Gilberto, 529, 555, 635
- Lumholtz, Carl, 635
- McBride, George M., 3, 10, 15, 75, 77, 80, 82, 85, 86, 89, 91, 93, 99, 100, 152, 153, 154, 173, 635
- McCorkle, Thomas, 303, 626
- Mackenzie, H. Bentley, 626
- McMahon, A. Philip, 638
- Madero, Francisco I., 109, 110, 111, 112, 113, 496, 635
- Madrina* ("godmother"), 398
- Magaña, Gildardo, 635
- Magner, J. A., 635
- Maguey, crop land devoted to, 244; use of, in making pulque, 311, 312, 313
- Maize; *see* Corn
- Malaria: incidence of death by, 336; states with highest rate of, 336
- Maldonado, 486
- Malinche, volcano of, 276
- Malinowski, Bronislaw, 358, 359, 635
- Mallory, Lester D., x, 6, 638; photographs by, Pls. VII, B, XVII
- Malva, in the diet, 313
- Mame, persons speaking, 56
- Mancera, Silvestre, 492, 635
- Mangelsdorf, P. C., 635
- María Auxiliadora, as a Sinarquista colony, 514-16
- Marital status, Mexico and United States compared, 389
- Markets, Indian village, 357-60; description of operation of, 357, 358; dovetailing of, 359; economic functions of, 359; geographical distribution of, 360; handicrafts of, 358; itinerant merchants operating between, 358, 359; recreational functions of, 359, 360; specializations of, 358; as survival of pre-Columbian period, 357, 360; photographs of, Pls. XVI, XVII
- Marriage: a civil contract, 377; and the family, 375-400; fees as deterrent to, 384; free unions as, 375; legal age for, 388; legality of, specified in Constitu-

- tion, 377; and marital unions, types of, 375; mass, 378-79; persons living together in, by type of ceremony, age, and size of community, 377; relative stability of, in Yucatán, 384-85
- Martínez del Río, Pablo, 635
- Martino, César, 635
- Masa* ("tortilla dough"), 304
- Mason, J. Alden, 635
- Matamoros, 271
- Matías Romero, 23
- Matlalzinca or Pirinda, persons speaking, 56
- Maudslay, A. P., 21, 630
- Maximilian of Austria, xix, 40
- Maya, persons speaking, 56
- Mayas, diet of, 309
- Mayeques* ("serfs"), 78
- Mayo, persons speaking, 56
- Mayorazgo* ("entailed estate"), 93
- Mayordomía*, 463-64
- Mayordomo*: of the fiesta, 444, 463-64; of the hacienda, 101-2
- Mazahua, persons speaking, 56
- Mazateco, persons speaking, 56
- Mazín Cervantes, Miguel, 635
- Medical services, 47; in the Laguna region, 235-37
- Medicine: and the predegree physician, 347; rural co-operative, 349-54; used by *curanderos*, 342
- Medieros* ("sharecroppers"), 258
- Médioni, Gilbert, 635
- Meixueiro, Jorge, 541, 542
- Mejía Fernández, Miguel, 635
- Méndez Medina, Alfredo, 636
- Mendieta, Gerónimo de, 636
- Mendieta y Núñez, Lucio, 75, 77, 317, 322, 323, 324, 636
- Mendizábal, Miguel O. de, 636
- Mendoza, Vicente T., 636
- Menonite colonies, 159-64; authority of the church in, 161-62; in Chihuahua, 159; colonization of, 159-64; in Durango, 159; location of, 160; number of inhabitants in, 160; number of villages in, 160; population of, 159, 160; village organization of, 161
- Merida, 18, 423; weakening of customs related to *compadrazgo* in, 399-400
- Mesa Andraca, Manuel, 636
- Mesa Central, description of, 10, 11, 12, 13
- Mesa del Norte, description of, 10, 11
- Messersmith, George S., x
- Mestizos, 52; landholdings of, 152; and the Law of Expropriation, 85-86; number of, 53; social status of, 51, 52
- Metate, 304, 355; Mexican woman grinding corn on, photograph of, Pl. XV
- Mexicali, housing in, 571
- Mexicali Valley: ejidos in, 128; health services in, 353; location of, 128; radios in, 301
- Mexican farm hand in the United States, photograph of, Pl. X
- Mexican Revolution; *see* Revolution
- Mexican-United States Agricultural Commission, 251, 252
- Mexicano or Nahuatl, persons speaking, 56
- Mexico, basin of, area included within, 12
- México, State of, 12, 13, 19, 20, 30, 31, 33, 35, 37, 57, 58, 91, 105, 138, 178, 179, 184, 185, 186, 242, 245, 261, 266, 269, 272, 276, 287, 293, 294, 299, 319, 327, 331, 335, 353, 364, 365, 376, 418, 419, 456, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Mexico City, viii, 10, 14, 64, 66, 101, 112, 159, 192, 218, 219, 268, 271, 273, 274, 276, 339, 348, 378, 388, 401, 407, 408, 410, 428, 429, 434, 439, 440, 502, 527, 540, 541, 546, 551, 556; agriculture in, 38; as a city of contrasts, 40; as a luxurious modern metropolis, 40; migration to, of former hacienda owners, 40; population increase of, 39-40; temperature in, 12; from the air, photograph of, Pl. III
- Meza Cienfuegos, Hilario, 638
- Mezcal, per capita consumption of, 312
- Michoacán, 12, 13, 19, 20, 30, 31, 33, 35, 37, 57, 58, 91, 96, 128, 138, 178, 184, 185, 215, 245, 261, 268, 269, 270, 272, 287, 289, 293, 294, 299, 319, 322, 327, 335, 353, 364, 365, 376, 418, 419, 424, 488, 511, 515, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Migration, of workers to and from the United States, 27, 65, 267-72
- Migratory farm workers, 262, 264
- Millán, Verna Carleton, 638
- Milpas* ("cornfields"), 104
- Mining, oil and natural gas, persons employed in, 64
- Misioneros*, 404; early duties of, 404-5
- Mitla, Oaxaca, 308; photograph of Catholic church at, Pl. XIX
- Mixe, persons speaking, 56

- Mixteca, renters and sharecroppers in, 258
 Mixteco, persons speaking, 56
Mole, in the diet, 307
 Molina Enriquez, Andrés, 21, 50, 52, 54, 75, 88, 114, 122, 638
 Monterrey, 273, 395
 Moore, Ross E., x
 Moors, 91
 Morality, dual standard of, 396-97
 Mordelón, 547, 548, 549
Mordida, 279, 545-54; definition of, 545-46; explanation of, 550-52; incidence of, 546
 Morelos, 13, 19, 20, 30, 31, 33, 35, 37, 43, 57, 58, 110, 138, 178, 179, 184, 185, 186, 195, 204, 215, 245, 261, 269, 287, 290, 293, 294, 299, 319, 322, 327, 336, 364, 365, 376, 418, 419, 451, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
 Morelos, José María, 474
 Morelos, Valley of, area included within, 13
 Moreno, Manuel M., 638
 Morisco, 52
 Morley, Sylvanus Griswold, 638
 Mormon colonies, 155-59; colonization of, 155-59; location of, 155-56; pattern of settlement of, 157; schools in, 159
 Mortality rates, 326-33; infant, compared with other Latin-American countries, 328-30; infant, by states and regions, 611; rural-urban, 330-32, 612; by states, 327, 610; trends in, 328, 329
 Mosk, Sanford A., 638
 Motz, Fred A., 6, 638
 Mountain barriers, 3, 4, 14
 Mulattoes, 52; number of, 50
 Mules: number of, on ejidos, 249, 250; total number of, 249
 Municipalities, 523-34, 554-55; area of, 526-30; councils of, 530-31; description of judges in, 533-34; lack of finance in, 554, 555; with no urban population, 529, 530; number of, 526; officers of, 530-34; population of, 526-30; rurality of, 530; size of, 526-30
Municipio, 100
 Muñoz, Rafael F., 638
 National Agricultural Bank, 258
 National Autonomous University of Mexico: degrees conferred by, prior to 1775, 402; founding of, 402; school of medicine of, 346, 349
 National Catholic Rural Life Conference, 470
 National Institute of Nutrition, 313
 National Polytechnical Institute, 348
 National School of Agriculture, 428-29; degrees granted by, 428; enrolment in, 428; faculty of, 429; location of, 428; methods of recruiting students for, 428
 Nationality: definition of, 60-61; foreign citizens by, and size of community, 585; population of foreign, by citizenship, 61
 Nativity groups, 58-60, 584, 585
 Natural regions, 11
 Navarro y Noriega, 23
 Nayarit, 14, 16, 19, 20, 30, 31, 33, 35, 37, 57, 58, 138, 178, 184, 185, 186, 245, 261, 264, 266, 269, 287, 293, 294, 299, 319, 327, 364, 365, 366, 367, 376, 377, 418, 419, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
 Nazas River, 220, 221
 Negroes, 50, 52
 Nelson, Lowry, 46, 157, 638
 Nicaragua: density of population in, 578; land area of, 578; number of inhabitants in, 578
 Nieve, C. A., 23
 Niggli, Josephina, 638
Niguas ("jigger flees"), effect on health, 324-25
Nixtamal, 304, 305
 Nobles, 79
 Noll, Arthur Howard, 638
 Noriega Hope, Carlos, 458, 461, 462, 463, 464, 465, 533, 534, 638
Normales ambulantes ("traveling normal schools"), objectives of, 406
 Northern Mesa, 10, 11
 Northrop, F. S. C., 460, 467, 639
Nouveaux riches, 564
 Nueva Italia: agriculture in, 128, 215; consumers' co-operative stores in, 238; housing in, 302, 571
 Nuevo León, 19, 20, 30, 31, 33, 35, 37, 39, 57, 58, 134, 138, 159, 178, 184, 185, 245, 261, 269, 287, 293, 294, 299, 319, 327, 364, 365, 376, 418, 419, 422, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
 Nutrition, National Institute of, 313; *see also* Diet

- Peonías*: definition of, 92-93; as forerunner of small private holding, 152-53; size of, 92-93
- Pequeña propiedad* ("small property"), 154, 174-75
- Pereyra, Carlos, 639
- Pérez Hernández, J. M., 23
- Pérez Toro, Augusto, 639
- Personal freedom: as a crucial test of the success of the Revolution, 571; as the greatest achievement of the Revolution, 572
- Peru: density of population in, 578; estimate of population in, 24; illiteracy in, 421; land area of, 578; life-expectancy in Lima, 333; number of inhabitants in, 578; political and social changes in, xiv
- Peso, value of, 8, 263
- Pestalozzi, 401
- Philip III, 96
- Philip IV, 94
- Phipps, Helen, 75, 77, 78, 81, 83, 85, 86, 94, 96, 112, 639
- Physical geography, 3-10
- Physicians: graduate medical students as, 346-49; lack of, in rural areas, 344-49; number of, in rural and urban areas, 345; plan for training of rural, 346-49; school for training of, 346; *see also* Health; Mortality rates
- Pilalli, 78
- Pimentel, Francisco, 23, 639
- Pinebon, Edgcumb, 639
- Pineapples: exports of, 601; trends of production in, 253
- Pinole, 307
- Piñon, use of, 313
- Plan de Ayala*: provisions of, 112; and the Revolution of 1910, 111-12
- Plan of San Luis Potosí*, 111, 113; agrarian provisions in, 110; as a call for revolution, 110
- Plantation store (*tienda de raya*), 103-4, 105, 106
- Platt, Robert S., 640
- Plaza, 395
- Plenn, J. H., 640
- Pneumonia: deaths caused by, 333, 335; factors responsible for death caused by, 335, 336
- Poblete Troncoso, Moisés, 640
- Poinsett, 23
- Poland: citizens of, in Mexico, by size of community, 585; population from, by citizenship, 61
- Political parties: official one-party system, 539-45; Partido de la Revolución Mexicana, 539; Partido Nacional Revolucionario, 539; Partido Revolucionario Institucional, 539
- Políticos*: and the agrarian program, 142, 147; and the Decree of 1915, 115-16; domination of rural communities by, 487, 536-37, 538, 573
- Poncho, 320
- Popocatepetl, 12
- Popoloca, persons speaking, 56
- Population: age composition of, 67-71, 586-88; age-sex pyramids of, 69; composition of, 50-71; concentration of, 28, 32; on ejidos, 596, engaged in agriculture, 36-38, 63-65, 580, estimates, in South American countries, 24; geographical distribution of, 28-31; growth of, 21-28; increase (1930-40), 25, 33-34; increase, rural-urban differential, 38, increase through migration, 27; Indian, prior to Conquest, 21, 22; living at Indian-colonial level, 363, 364, 365; by major political categories (1910), 41; in Mennonite colonies, 159-60, proportions of, by race, 53; regional differences in, 32-34; by regions and states (1930 and 1910), 33; by religious preference, 451, residing in state of birth, 58; rural-urban, 34, 38-40, 581; sex composition of, 67-71, 586-88; by size of community, 38, 43-46; speaking Indian languages, 582, 583; by types of communities, 41, 44
- Population density: compared with other countries, 28; compared with 21 republics of the Western Hemisphere, 578; by minor civil divisions, 31; in relation to altitude above sea level, 30
- Porter, Katherine Anne, 640
- Portes Gil, Emilio, 124; photograph of, Pl. XXIII
- Potatoes: exports of, 601; imports of, 601
- Poultry: number of, on ejidos, 249, 250, total number of, 249
- Powell, N. P., 333, 630
- Pozole*: preparation of, 307; use of, 307
- Prado, E. L., 640
- Preface, vii-xi
- Preseott, William H., 640
- Presidente municipal*, 530-31
- Presidents of Mexico, six former presidents with Avila Camacho on Independence Day, 1942, photograph of, Pl. XXIII
- Priestley, Herbert I., 10, 109, 403, 466, 640

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- dian influences on, 357; symbols of; *see* Religious symbol
- Religious symbol, 459-71; church edifice as a, 466-67; cross as a, 459, 468; domestic shrine as a, 459, 467-68; priest as a, 468-71; village patron saint, 460-66; Virgin of Guadalupe, 459-60
- Remuneration of peons, methods of, 106-7
- Reno, 386
- Renters: ex-hacendados in the Laguna region, 259; of land from ejidatarios, 258, 259
- Repatriated Mexicans: colony of, at Matamoros, 33; predominant among immigrants, 27, 270
- Retablos*, dedicated to village patron saint, 462, 465
- Revillagigedo, 23
- Revolution: 563-72; agrarian aspects of, 108-23; armed rebellion, 110-11; causes of, 108-9; chronological list of events of, 113-14; importance of, to a study of rural Mexico, viii; land redistribution resulting from, 124-51; objectives, accomplishments, and failures of, as a process, viii
- Rice: crop land devoted to, 244; exports of, 257, 601; index of production of other products and, by years, 255; trends in production of, 253
- Rincón Gallardo, Carlos, 641
- Río del Fuerte, damming of, 172
- Río Verde, Mormons on, 156
- Rippy, J. Fred, 641
- Riva Palacio, Vicente, 641
- Rivera, Diego, 641
- Rivera Cambas, 23
- Roads, 8, 9
- Robinson, William D., 641
- Rockefeller Foundation, 280; co-operation of, in building the health program, 354; and rural health, 296; study of diets by, 314
- Rodríguez, Abelardo L., 127, 218, 549, 572; photograph of, Pl. XXIII
- Rodríguez, Antonio L., 641
- Rodríguez Adame, Julián, 641
- Rojas González, Francisco, 641
- Romney, Thomas C., 155, 157, 641
- Ross, E. A., 641
- Royal and Pontifical University of Mexico, founded 1551, 402
- Rural communities, recreational facilities of, as described by Bonilla y Segura, 438-39
- Rural co-operative medicine, 349-54; number of agencies co-operating, 351, 352; program of hospital construction, 354; types of services provided, 349-51
- Rural cultural missions, 433-53; case study of rural cultural mission of San Pablo del Monte, 440-51; duties of missionaries, 435-40; locations of, 434; major problems of, 440; number of, 433; objectives of, 434; organization of, 433; origin of, 404-6; personnel of, 433; purpose of, 433; types of projects undertaken by, 435; use of community approach in, 434
- Rural normal schools, 407-10; early organization of, 408; enrolment in, 409; facilities and equipment of, 409; Federal Institute of Teacher Training, 410; first school organized in 1922, 407; number and location of, 408; objectives of, 408; shift from co-educational to unisexual, 408; social action program of, 408
- Rural schools, 404-16; agricultural colleges, 428-29; agricultural schools, 424-26; elementary, 411-16, 614; Indian, 426-28; rural cultural missions, 433-53; rural normal schools, 407-10
- Rural teachers: salaries of, 410; without teaching certificates, 410; training received by, 409-10
- Rurales* (mounted police force during Díaz regime), 525, 571
- Rural-urban differences in population growth, 38-39
- Rural-urban distribution of the population, 34-39
- Russian colony of Lower California, 164-66; colonization of, 164; farming methods in, 165-66; land systems of, 165; population of, 164; religion of, 165; village pattern of, 164-65
- Sáenz, Moisés, 641
- Sahagún, Bernardino de, 402, 479, 641
- Salero, Virgil, 641
- Sambaigo, 52
- San Antonio Valley, Mennonites in, 159
- San Luis Potosí, 19, 20, 30, 31, 32, 33, 35, 37, 57, 58, 134, 138, 159, 178, 184, 185, 245, 261, 265, 269, 287, 293, 294, 299, 319, 327, 364, 365, 376, 418, 419, 422, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- San Pablo del Monte: accomplishments of the cultural mission at, 447-51; case study of, as a cultural mission, 440-51; economic organization of, 441; location

- of, 440; organization of co-operatives in, 445-47; political organization of, 442-43; as a predominantly Indian community, 441
- Sánchez, George I., 401, 403, 405, 476, 480, 641
- Sánchez, Pedro C., 3, 641
- Sanders, E. M., 641
- Santa Clara, Mennonites in, 159
- Santo patrono* (village patron saint), 459, 460-66
- Sauer, C. O., 641, 642
- Schmieder, Oscar, 164, 165, 642
- School of Rural Medicine (La Escuela Superior de Medicina Rural), 348
- Schools, 401-32; agricultural colleges, 428-29; elementary, 410-16; first, in New World, 401; on the hacienda, 103; Indian, 426-28; in the Laguna region, 237; National University of Mexico, 402; normal, prior to 1910, 404; rural normal, 407-10; vocational, of agriculture, 424-26
- Schools, elementary, 410-16; of Article 123 of the Constitution, 411, 412, 413, 416; average attendance in, 416; course of instruction in, 411; enrolment in, 412, 613; federal, 411, 412, 416; grades in, 411; number of, 411; per cent of total enrolment found in each grade in, 415, 613; private, 411, 412, 416; promotions in, 416; reasons for small enrolment in, in relation to number of children of school age, 414-15; rural, 411-16, 614; state and municipal, 411, 412, 416; urban, 411-16, 615
- Schreiter, Hellmuth Oskar, 486, 487
- Schurz, William Lytle, 642
- Seasonal land, 10
- Secretariat of Agriculture, 189, 190; acknowledgment to, ix
- Secretariat of Hydraulic Resources, 172
- Secretariat of Public Education, 280, 369, 394, 395, 406, 409, 428, 432, 445, 446, 535, 538; acknowledgment to, ix
- Senate: composition of, 523; term of office, 523
- Sender, Ramón J., 642
- Senior, Clarence, 192, 642
- Serapes, 319, 358
- Serenata*, 395
- Sesame: crop land devoted to, 244; trends in production of, 253
- Seville, 95
- Sewage disposal, lack of facilities for, 297
- Sewing machines: distribution of, 298; number of, per 100 families, 298, 299; Singer, 298
- Sex composition of the population, 65-71, 586-88
- Sharecroppers, 258, 259
- Shattuck, George C., 344, 642
- Shedd, Margaret, 642
- Sheep: exports of, 601; imports of, 601; number of, on ejidos, 249, 250; total number of, 249
- Shoes: by regions, 318; by size of community, 317; wearers of, by language spoken, 361, 363
- Sierra de Juárez, 478
- Sierra, Justo, 477, 642
- Sierra Madre Occidental, 14
- Sierra Madre Oriental, 14
- Sierra Madre del Sur, description of, 15
- Silva Hérzog, Jesús, 108, 150, 151, 544, 545, 552, 564, 642
- Simpson, Eyler N., viii, 3, 10, 12, 22, 42, 54, 75, 79, 86, 98, 108, 112, 113, 114, 116, 117, 122, 123, 254, 257, 308, 458, 642
- Simpson, Lesley Byrd, 642
- Sinaloa, 14, 19, 20, 30, 31, 33, 35, 37, 57, 58, 128, 138, 148, 172, 178, 184, 185, 215, 245, 261, 269, 287, 293, 294, 299, 302, 319, 327, 353, 364, 365, 376, 377, 418, 419, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Sinarchism, 484-522; appeals made by, to the population, 498-501; attitudes toward Protestants, 409-10; control of government as an objective of, 416-520; freedom of religion as an objective of, 509-10; land as an objective of, 510-16; martyrdom as an appeal of, 498-99; nature of, 487; objectives of, 484, 508-22; origin of, 485; preservation of Spanish traditions by, as an objective of, 416; as a protest against anti-church legislation, 491-95; as a protest against excesses and failures of Mexican Revolution, 487-91; as a protest against the invasion of Mexico by either communism or Anglo-American culture, 495-98; requirements for membership in, 501; secret committee of, 502; self-sacrifice in, 500-501; use of Sinarquista symbols as slogans in, 500
- Sinarquista movement, ix, 484, 522; avowed objectives of, 484; birthplace of, 485; colony of María Auxiliadora,

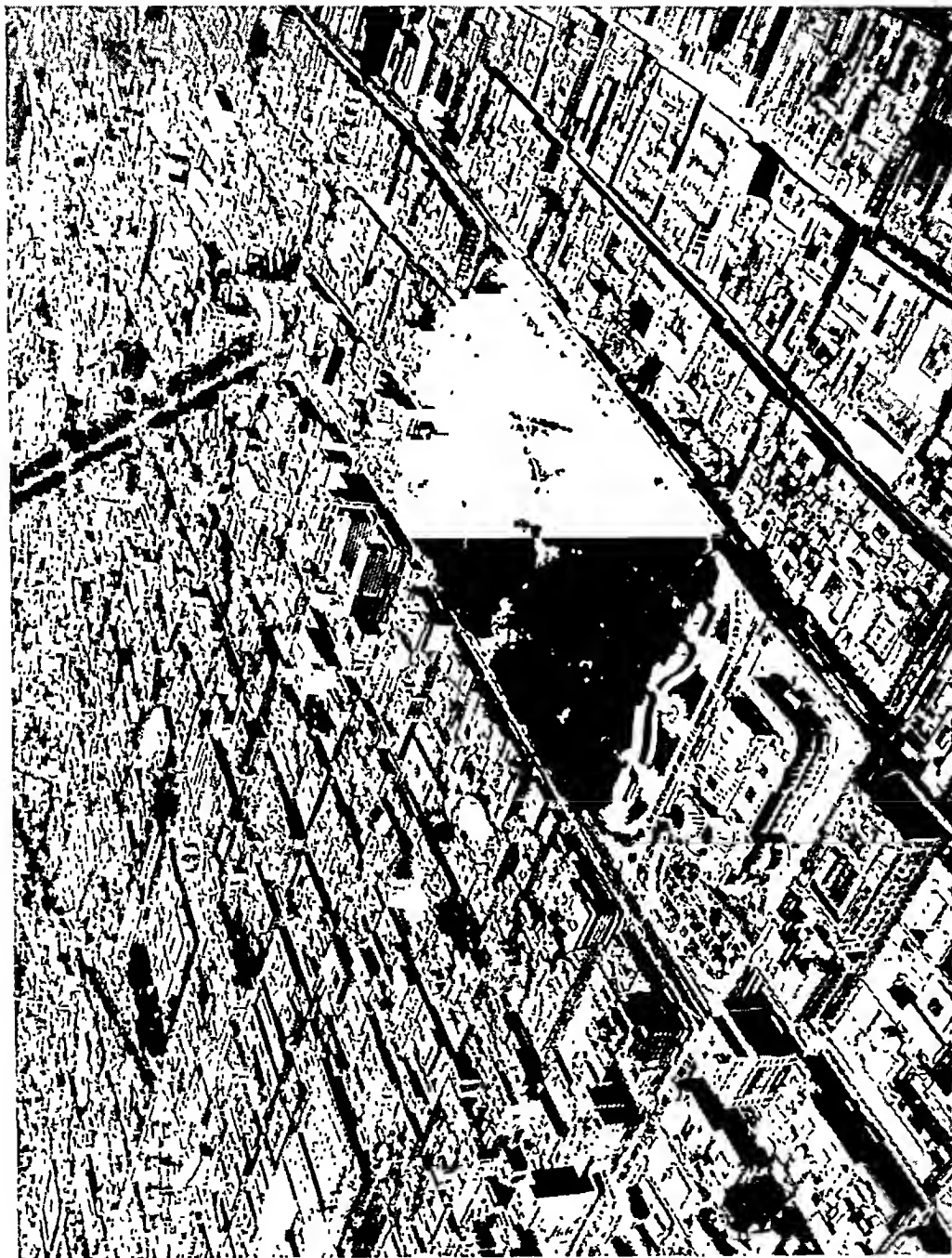
- 514-16; colony of Tamaulipas, 516; colony of Villa Kino, 511-14; description of Sinarchist Mexico in 1960, 518-20; election of member to National Chamber of Deputies, 522; the "León massacre" of, 521-22; military aspects of, 506-8; norms of conduct for Sinarquista women, 503; official name of, 485; origin of, 485-587; selection of officers of, 504-5; Sinarquista colonization, 511-16; the Sinarquista organization, 501-8; suppression of Sinarquista newspaper, 484, 517; youth organization of, 502
- Sisal fibers, 18
- Siurob, José, 642
- Skillin, Edward, Jr., 520, 642
- Slavery, abolition of, 50; in colonial Mexico, 50; in pre-colonial Mexico, 78
- Small private holding: colonization and development of, 152-81; distribution of, by regions, 592; resulting from irrigation projects, 171-73; types of, 173-75
- Small property; see *pequeña propiedad*
- Smallpox, 22
- Smith, J. H., 642
- Smith, J. Russell, 642
- Smith, Mervin G., 251, 642
- Smith, T. Lynn, 48, 642
- Social and cultural values, problems of changing, 369-71
- Social institutions, 47, 71, 373-559; education and the rural schools as, 401-32; government as, 523-59; marriage and the family as, 375-400; religion and the rural church as, 454-83; rural cultural missions as, 433-53; Sinarquista movement as, 484-522
- Social ladder, 51-52
- Social services, definition of, 47
- Sociedad de Geografía y Estadística, 23
- Soil conservation, problem of, 275-79; service, 276, 277, 278
- Soil depletion, as a problem, 275-79, 567
- Soil erosion: as a problem, 275-79, 567; in Mexico, photograph of, Pl. XI
- Sonora, 14, 19, 20, 30, 31, 33, 35, 37, 57, 58, 89, 128, 138, 155, 156, 178, 183, 184, 185, 215, 245, 261, 262, 269, 287, 293, 294, 299, 319, 327, 353, 364, 365, 376, 418, 419, 422, 511, 512, 526, 528, 531, 549, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Sorokin, P. A., 65, 331, 642
- South America, 24
- Southern escarpment, 14
- Southern highlands, 15, 16
- Soviet Russia: collective farms of, 227, 498
- Spain: citizens of, in Mexico, by size of community, 585; crop yields in, compared with Mexico, 247; nationals of, entering and leaving Mexico, 62; population from, by citizenship, 61
- Spaniards, xvii, 21, 22, 77
- Spanish cultures, combination with Indian, 355-71
- Spanish Falange, 484, 496, 497
- Spanish refugee colony, 166-68; agriculture in, 167, 168; decline of, 168; location of, 168; village pattern of, 167
- Spence, Lewis, 642
- Spinden, Herbert J., 642
- Standards and levels of living, 283-371; clothing, 316-25; diet, 304-16; health and mortality, 326-54; housing, 285-303; Indianism in relation to, 355-71
- Starr, Frederiek, 642
- State government, 523
- States and territories, list of, 20
- Statistical regions, 18-20; map of, 19
- Steggerda, Morris, 305, 309, 642
- Steinbeck, John, 642
- Stephens, John L., 643
- Strode, Hudson, 643
- Stueken, Eduard, 643
- Sugar: imports of, 601
- Sugar cane: crop land devoted to, 244; index of production of henequen, cotton, and, by years, 255; trends in production of, 253; value per hectare of, on ejidos compared with private holdings, 248-49
- Summers, Lionel M., 643
- Surveying of lands, as source of land monopoly, 98
- Swanton, John R., 643
- Swine: exports of, 601; imports of, 601; number of, on ejidos, 249, 250; total number of, 249
- Syphilis, 22; deaths from, 338
- Tabasco, 8, 17, 18, 19, 20, 30, 31, 33, 34, 35, 37, 42, 57, 58, 90, 138, 175, 178, 184, 185, 245, 246, 261, 264, 266, 269, 287, 291, 293, 294, 299, 319, 327, 336, 364, 365, 376, 377, 418, 419, 422, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Tacos, 307

- Tamales, 307
- Tamaulipas, 19, 20, 30, 31, 33, 35, 37, 41, 57, 58, 128, 138, 178, 184, 185, 195, 204, 215, 245, 261, 269, 271, 287, 293, 294, 299, 319, 327, 331, 353, 364, 365, 376, 418, 419, 422, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 591, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Tamayo, Jorge L., 3, 643
- Tamazunchale: soil erosion in vicinity of, 276; photograph of, Pl. XI
- Tampico, 317, 360, 366, 379
- Tannenbaum, Frank, 75, 101, 102, 105, 115, 117, 455, 457, 458, 459, 469, 470, 643
- Tapachula, consumers' co-operative stores in, 238
- Tapexco, description of, 291
- Tarahumar, persons speaking, 56
- Tarahumaras: diet of, 307; living at Indian-colonial level of living, 317, 366, 367
- Tarascan Indians: clothing worn by, 322, 356; housing of, 302; vitamins and minerals in diet of the, 310, 311
- Tarasco, persons speaking, 56
- Tarlock, Anthony, cited, Pl. IX
- Tax, Sol, 536, 537, 643
- Taylor, Carl C., acknowledgment to, x
- Taylor, Paul S., 264, 396, 643
- Teachers: on haciendas, 102; lack of competent, 570; low salaries of, 570; training received by, 409-10
- Tecpan*, 78
- Tecpan-tlalli*, 78
- Tehuantepec, isthmus of, 4; province created from, 155
- Tejelabal, persons speaking, 56
- Telephones, 47, 301; distribution of, 301; number of, 301, 608; number of inhabitants per telephone, by states and regions, 608
- Temazcal* ("steam bath"), description of, 295-96
- Temperatures, differences in, 4, 12
- Temples, ancient Mayan, at Chichen-Itza, Yucatán, photograph of, Pl. XVIII
- Teocalli*, 79
- Teotihuacán: adultery in, 382; characterization of municipal judges in, 533-34; clothing worn by Indians in, 321; importance of the village patron saint in, 461; local character of religion in, 458, 462; mercenary tendencies of priests in, 479; relative stability of marital unions in, 381-82; role of godparents in, 398-99
- Tepehua, persons speaking, 56
- Tepehuanes, living at Indian-colonial level of living, 366
- Tepehuano, persons speaking, 56
- Tepeyac, hill of, 459
- Tepezcuinte*, in the diet, 308
- Tepoztlán, clothing worn by Indians in, 290, 294, 296, 322, 323, 451, 452, 462, 465, 468
- Tequila*, per capita consumption of, 312
- Terrenos baldíos* ("idle lands"), 87-88; law of, 110
- Terrill, Katherine, 633
- Texcoco, site of the first school in the New World, 401
- Thomas, Cyrus, 643
- Thompson, Edward Herbert, 643
- Thompson, John Eric, 643
- Thompson, Wallace, 397, 643
- Thornthwaite's classification of moisture adequacy, 8
- Tienda de raya* ("plantation store"), 103-4, 105, 106, 571
- Tierra caliente* ("hot country"), 6
- Tierra fría* ("cold country"), 6
- Tierra y Libertad* (battle cry of Zapata), 111, 145, 566
- Tierra templada* ("temperate lands"), 6
- Tithes and alms, collected by clergy, 94
- Tlapaneco, persons speaking, 56
- Tlaxcala, xviii, 12, 19, 20, 30, 31, 33, 35, 37, 57, 58, 138, 178, 179, 184, 185, 245, 261, 269, 276, 287, 293, 294, 299, 319, 327, 331, 335, 336, 364, 365, 376, 418, 419, 422, 440, 526, 527, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Tobacco: production of, during Díaz regime, 252; trends of production in, 253
- Toluca: arts and crafts in, 272; basin of, area included within, 13
- Tomatoes: exports of, 601; index of production of other products and, by years, 255; trends in production of, 253
- Toor, Frances, 643
- Topography, 2-18
- Torna-atrás*, 52
- Toro, Alfonso, 643
- Torquemada, 456
- Torreón: as central city in the Laguna region, 195, 207, 217, 235, 238; ejido bank in, 224, 225, 232; location of, 217; prostitution in, 236

- Torres Bodet, Jaime, 394, 409, 421, 422, 643
- Torres Bucno, Manuel, 486, 487, 521
- Tortillas: consumption of, 305; importance of, in the diet, 308, 356; preparation of, 304
- Totonaco, persons speaking, 56
- Towns: classification of, 46; number of, 44; population of, 44-45; *see also* Pueblo
- Transportation routes, 13, 14
- Tribunal del Consulado, 23
- Trowbridge, Edward D., 643
- Trueba Olivares, José, 486, 504, 511, 520
- Tuberculosis, deaths caused by, 337
- Turner, John Kenneth, 643
- Tusik, Yucatán: importance of *compadrazgo* in, 399; stability of marital unions in, 384-85
- Tzendal or Tzeltal, persons speaking, 56
- Tzotzil, persons speaking, 56
- Unidad industrial*, definition of, 41-42
- Unión libre*: *see* Free union; Marriage
- Unión Nacional Sinarquista, 485, 643; *see also* Sinarchism
- United States, vii, xi, xix; age and sex composition in, 65-71; citizens of, in Mexico by size of community, 585; crop yields in, compared with Mexico, 247; deaths from selected causes in, 338; density of population of, 578; increase of population in, 22; land area of, 578; life-expectancy in, 332-33; marital status in, 389; Mexican immigration to and emigration from, 27, 61-62; migration of Mexican farm laborers to and from, 267-69; number of births per 1,000 women in, 392; number of inhabitants in, 578; population from, by citizenship, 61; settlement of, compared with Mexico, 21-22; Sinarquista propaganda against, 495-98; size of families in, 391; territory taken by, 24; trend of birthrate in, 26; trend of death rate in, 26
- United States Bureau of the Census, ix
- United States Department of State, vii
- United States Embassy, vii
- University of Connecticut, x
- University of Mexico, 402; degrees conferred by, prior to 1775, 402; founding of, 402; School of Medicine of, 346, 349
- Urban cultural missions, 433
- Urban influence, degree of, 59
- Urbanization, 39-40
- Urquiza, José Antonio, Jr., 485, 486, 498
- Uruapan, arts and crafts in, 272
- Uruguay: crop yields in, compared with Mexico, 247; date of last population census in, ix; density of population in, 28, 578; illiteracy in, 421; land area of, 578; number of inhabitants in, 578
- Vaillant, George C., 643
- Valladolid, 18
- Valle del Mezquital: 265, 266; diet of Otomí Indians in, 314-16; housing in, 286; scarcity of water in, 295, 296
- Vanilla: exports of, 601; trends of production in, 253
- Vargas, J. Octavio, 643
- Vaseo de Quiroga, 356
- Vasconcelos, José, 476, 643
- Vásquez, Genaro V., 81, 644
- Vásquez, Véjar, 394
- Vásquez Gómez, Francisco, 644
- Velasco Gil, Carlos, 644
- Venezuela: birth rate in, 389; density of population in, 28, 578; estimate of population in, 24; excess of births over deaths in, 26; infant mortality in, 329; land area of, 578; life-expectancy in, 333; number of inhabitants in, 578; political and social changes in, xiv; population engaged in agriculture in, 37
- Veraacruz, xviii, 8, 12, 13, 14, 17, 19, 20, 30, 31, 33, 35, 37, 57, 58, 91, 138, 172, 178, 184, 185, 245, 261, 264, 266, 269, 287, 293, 294, 299, 319, 327, 336, 353, 364, 365, 376, 377, 418, 419, 498, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Vigilance committee, of the ejido, 189
- Villa, definition of, 41
- Villa, Francisco, 110
- Villa Kino (Sinarquista colony), 511-14
- Villa R, Alfonso, 342, 343, 423, 640
- Village markets; *see* Markets
- Village settlement patterns, 46-49; advantages of, 46; disadvantages of, 47-49
- Villages: effect of Decree of 1915 on, 115; definition of, 45-46; description of, 34, 35; number of, 44; number of inhabitants in, 44-45
- Violent and accidental deaths, 46, 65, 336, 338
- Virgin of Guadalupe, 459-60; basilica of, 460; as Mexico's patron saint, 460; as a *morena*, 460; origin of, 459; pilgrimages

- to shrine of, 460; religious devotion of inhabitants to, 460; image of, photograph, Pl. XX
- Virgin Mary, 459, 460
- Vitamin: content of, in pulque, 312; mineral and, content of the diet, 310, 311, 314-16
- Vivas, Eliseo, 644
- Vogt, William, 644
- Volcano, birth of a, photograph of, Pl. I
- Volcanoes, principal, 12
- Volume of industrial production, index of, by years, 273, 274
- Von Stetten, photograph by, Pl. XX
- Wages: of farm laborers, 259-62; map of variations in farm, by minor civil divisions, 263; in relation to cost of living, 107, 260, 262
- Wagner, Henry Raup, 644
- Wallace, Lew, 644
- War Food Administration, 268
- War of Independence (1810-21): description of, 97; slaves freed by, 50
- Water; see Drinking water
- Water rights, alienation of, 88
- Watson, Goodwin Barbour, 644
- Wauchoppe, Robert, 286, 644
- Weathers, Kenneth, 644
- Weinstock, Herbert, 368, 633, 640
- Western Escarpment, 15
- Weyl, Nathaniel and Sylvia, 524, 644
- Wheat: per acre yield of, compared with certain other countries, 247; crop land devoted to, 244; imports of, 601; index of production of other products and, by years, 255; trends in production of, 253; value per hectare of, on ejidos compared with private holdings, 248-49; yield per hectare of, on ejidos compared with private holdings, 248
- Wheeler, L. A., x
- Whetten, Nathan L., xiii, xiv, xviii, xix; photographs by, Pls. IV, V, VI, VII, A, XII, XIII, XIV, XV, XVI, A, XIX
- Whetten, N. Rey, photograph by, Pl. VIII
- Whiskey, per capita consumption of, 312
- Whitaker, Arthur P., 578, 644
- White, John W., 644
- Wilson, C. M., 644
- Witchcraft and black magic: in Dzitás, Yucatán, 341; role of *curandera* in, 341, 342; role of h-men in, 342, 344
- Wolf, Bertram, 641
- Woman suffrage: in municipal elections, 523; in national elections, 522, 523
- Wood, Clarence E., 644
- Wooden plows: regional distribution of, 245; as a Spanish contribution, 356; used in agriculture, 245
- Wooster, Julia L., 644
- Workers' cultural missions, 433
- World War II, emigration to United States during, 27, 267-68
- Wylie, Kathryn H., 644
- Yañez, Eulalia, 379
- Yaqui: persons speaking, 56; rebellion, description of, 89
- Yaqui Valley: location of, 128; location of ejidos in, 183; map of ejidos in, 183; medical service available to inhabitants of, 353; wheat and rice areas of, 128, 215
- Yucatán, 18, 19, 20, 30, 31, 33, 35, 37, 56, 57, 58, 87, 88, 128, 138, 178, 184, 185, 186, 195, 245, 246, 261, 264, 265, 268, 286, 287, 291, 292, 293, 294, 299, 319, 320, 327, 331, 339, 341, 353, 364, 365, 376, 384, 385, 399, 400, 418, 419, 423, 461, 524, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612; clothing worn by men in, 321; clothing worn by women in, 321; as a henequen-producing area, 128, 216
- Zacatecas, 13, 14, 19, 20, 30, 31, 32, 33, 35, 37, 57, 58, 134, 138, 178, 184, 185, 245, 261, 265, 267, 269, 287, 293, 294, 299, 319, 327, 364, 375, 376, 418, 419, 422, 526, 528, 531, 575, 576, 577, 579, 580, 581, 582, 583, 584, 590, 593, 594, 595, 596, 597, 598, 599, 600, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612
- Zacatepec: location of, 215; as a sugar-cane-producing area, 215, 216
- Zacatón: areas producing, 266; use of, 266
- Zapata, Emiliano, 110, 111, 112, 113, 122, 459, 644
- Zapoteco, persons speaking, 56
- Zayas Enríquez, R. de, 23
- Zermeno, Manuel, 485, 486, 504, 505
- Zierer, photograph by, Pl. I
- Zimmerman, C. C., 65, 331, 642
- Zingg, Robert M., 626
- Zoque, persons speaking, 56
- Zubirán, 379
- Zumárraga, Archbishop, 402, 479

PLATES



MEXICO CITY FROM THE AIR

In the foreground is the beautiful Alameda Park. Below and to the left is the Palace of Fine Arts; further to the left is the Post Office. The beautiful boulevard, Paseo de la Reforma, lined with trees, may be seen to the right of the park extending to the top of the picture. (Courtesy of Compañía Mexicana Aerofoto, S.A.)



VILLAGE STREET IN QUERÉTARO

Most Mexicans live in villages. Contrast this with the luxurious capital city (Pl. III). (Photo by author)



A. EJIDATARIOS IN OAXACA

The three in the front row are members of the Executive Committee of the ejido; the one in the center is chairman. (Photo by author.)



B. EJIDATARIOS IN HIDALGO

Waiting in line for the President of the Republic, who will give them titles to their land
(Photo by author.)



EJIDATARIO HARVESTING SUGAR CANE IN OAXACA

(Photo by author)

PLATE VII



A. WIVES AND CHILDREN OF EJIDATARIOS SORTING COFFEE
IN THE STATE OF CHIAPAS

(Photo by author)



B. EJIDATARIO SUPPLEMENTING HIS INCOME BY HAULING SAW LOGS

(Photo by L. D. Mallory)



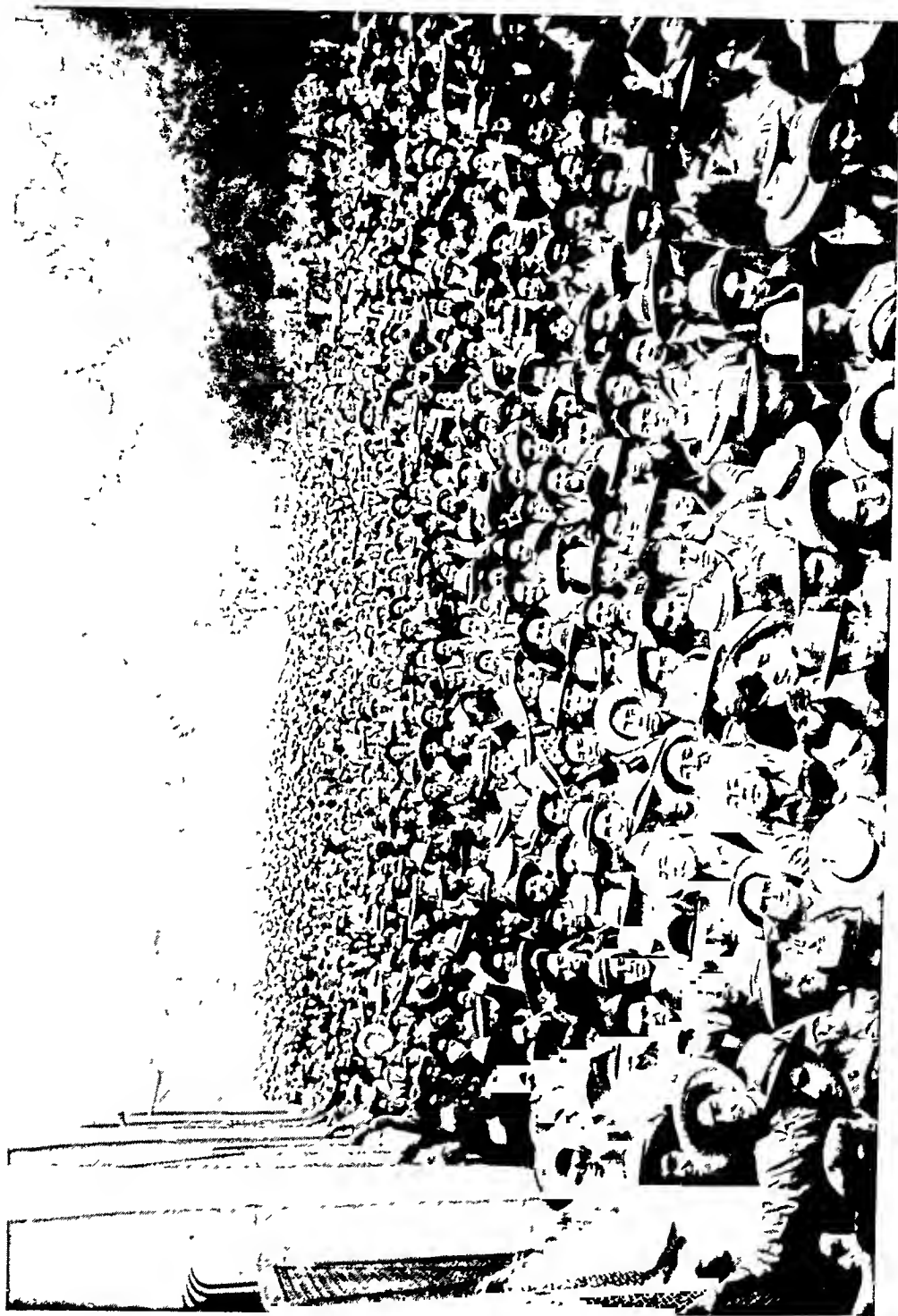
A. EJIDATARIOS PLOWING SCHOOL LANDS WITH OXEN AND
WOODEN PLOWS IN THE STATE OF JALISCO

(Photo by N. Rey Whetten)



B. THE AUTHOR (SECOND FROM LEFT), WITH THREE EJIDATARIOS
VISITING EJIDOS NEAR BERRIOZABAL, CHIAPAS

PLATE IX



Braceros (DAY LABORERS)

One of the many occasions when fifty thousand Mexicans crowded around the national stadium in Mexico City, seeking a chance to go as war workers to the United States. (Photo, courtesy Anthony Tarlock.)



MEXICAN FARM HAND (*Braccro*) FROM MICHOCÁN
IN THE UNITED STATES
(Courtesy of Pan American Union)

PLATE XI



SOIL EROSION IN MEXICO

Farming on the steep slopes destroys the forests and results in serious soil erosion. (Courtesy, Office of Foreign Agricultural Relations, United States Department of Agriculture.)

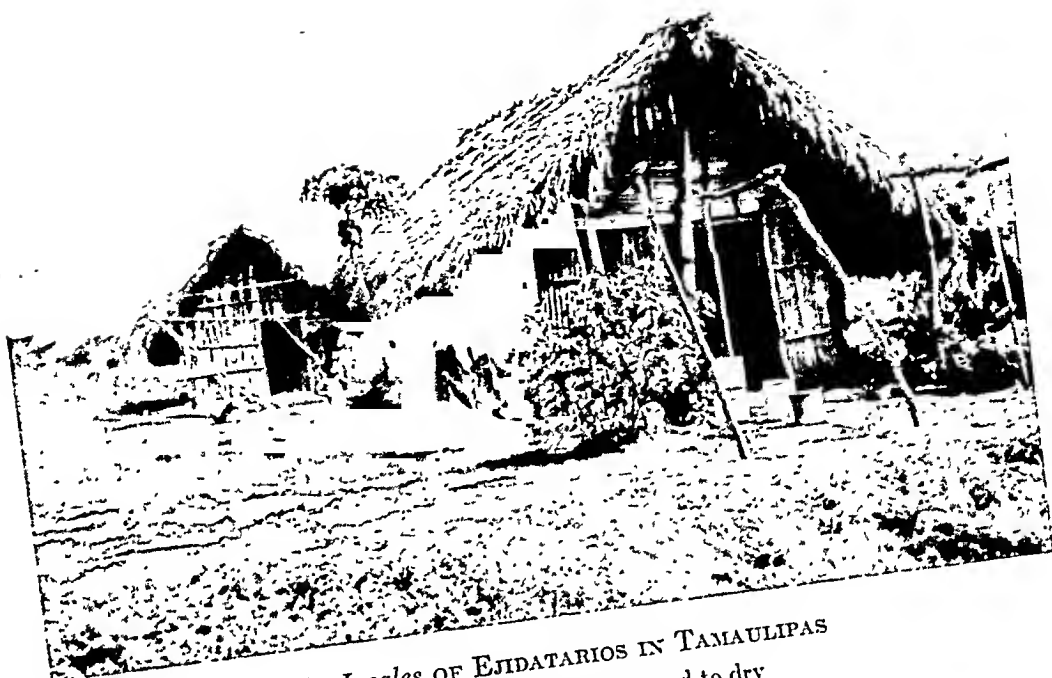


A. NEATLY CONSTRUCTED *Jacal* IN YUCATÁN
(Photo by author)



B. MAKESHIFT *Jacales* OF CO

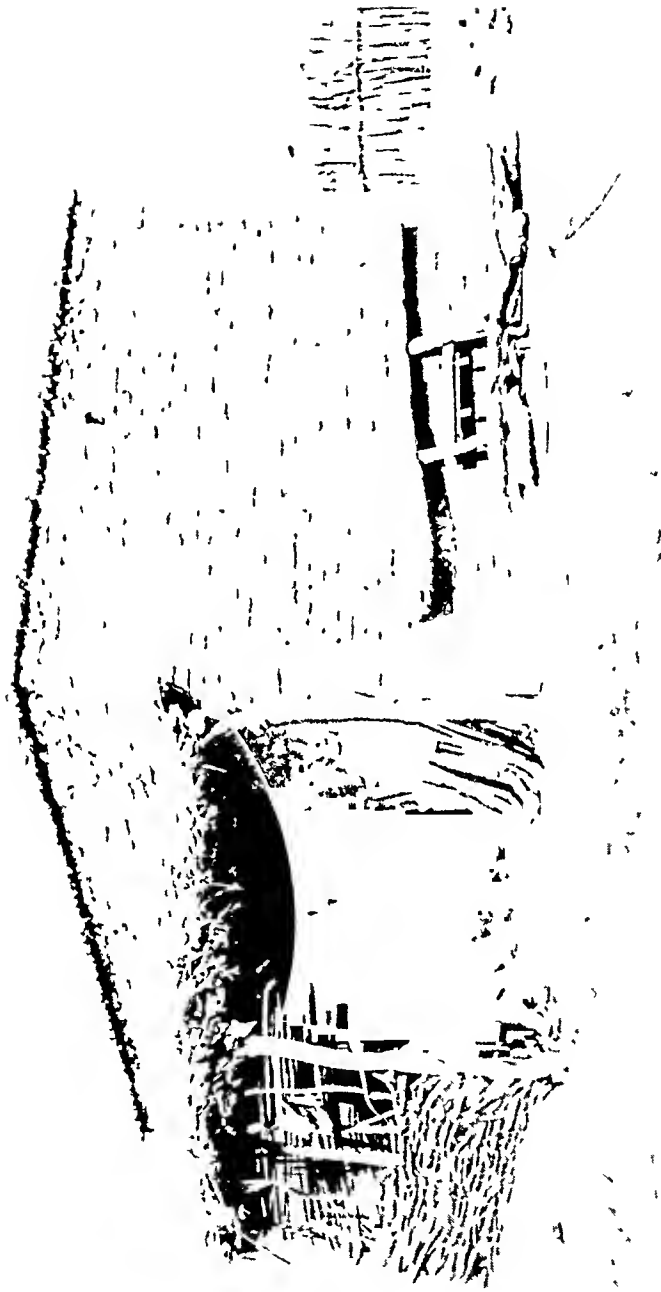
PLATE XIII



A. *Jacales* OF EJIDATARIOS IN TAMAULIPAS
Note laundry spread on ground to dry
(Photo by author)



PLATE XIV

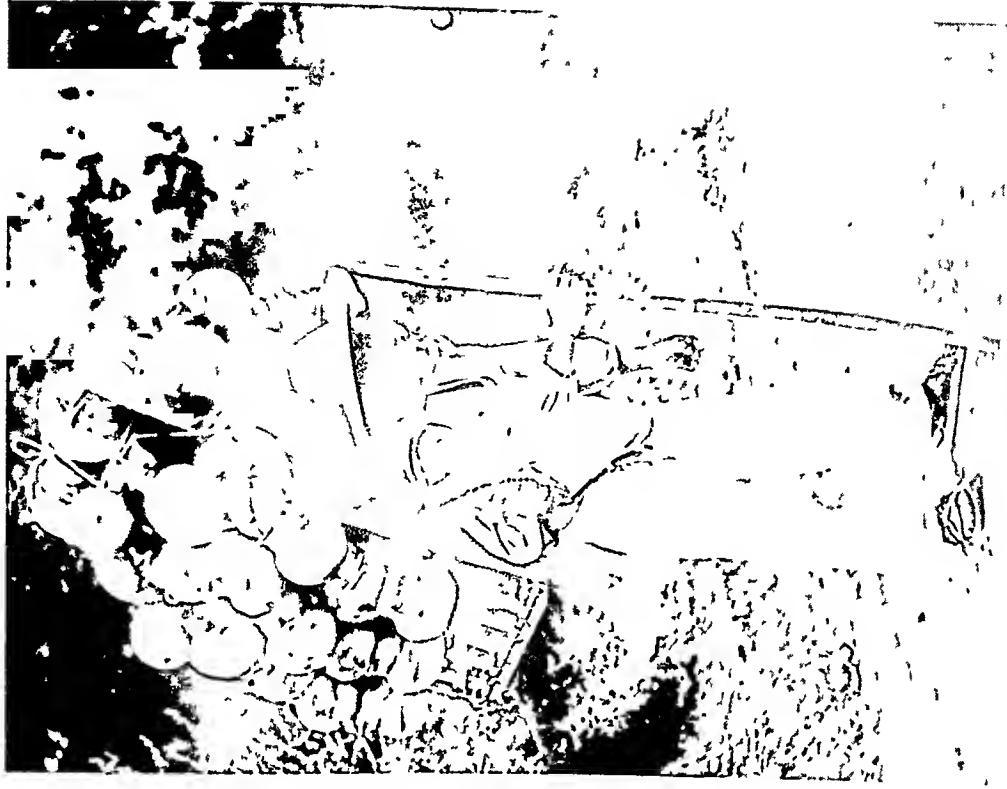


SINGLE-FAMILY HOUSE IN SONORA

Lean-to is used both as kitchen and as entrance (Photo by author)



A. GOING TO MARKET IN OAXACA
(Photo by author)



B. INDIAN CARRYING LOAD OF POTTERY

PLATE XVII



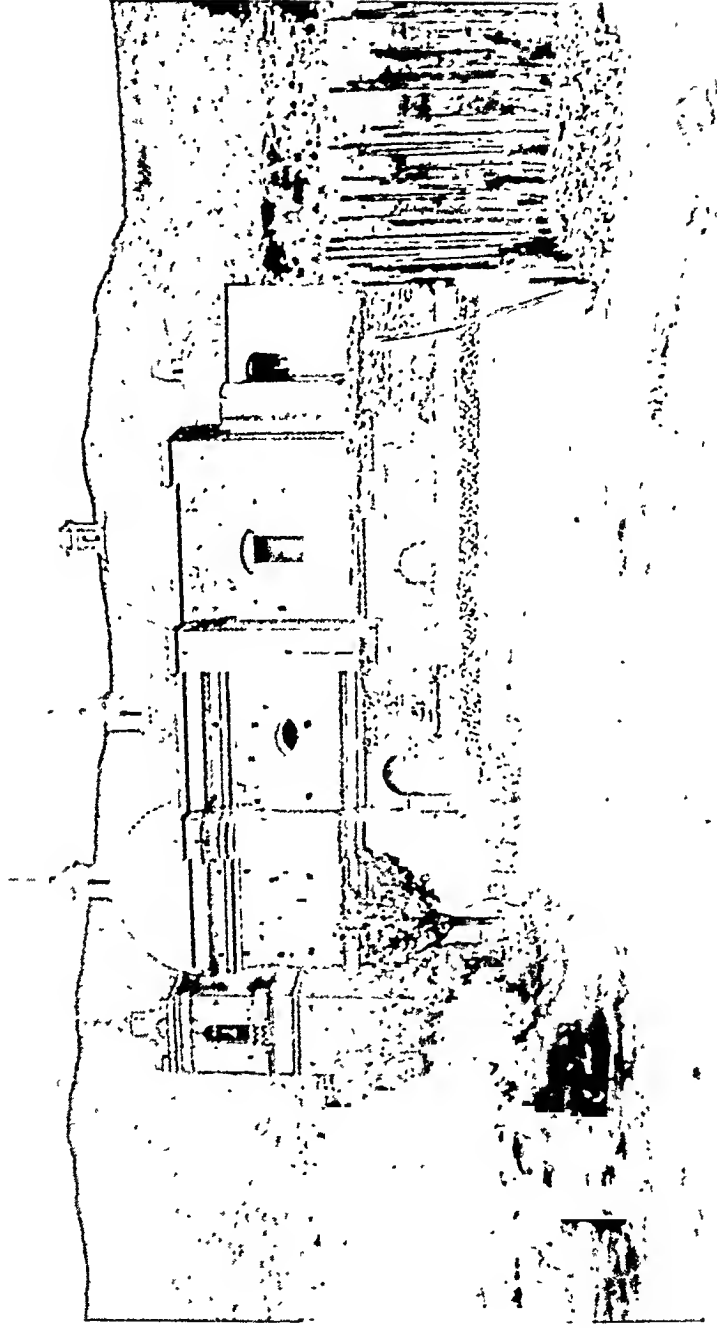
VILLAGE PIG MARKET IN THE STATE OF PUEBLA

(Photo by L. D. Mulloy)

PLATE XVIII



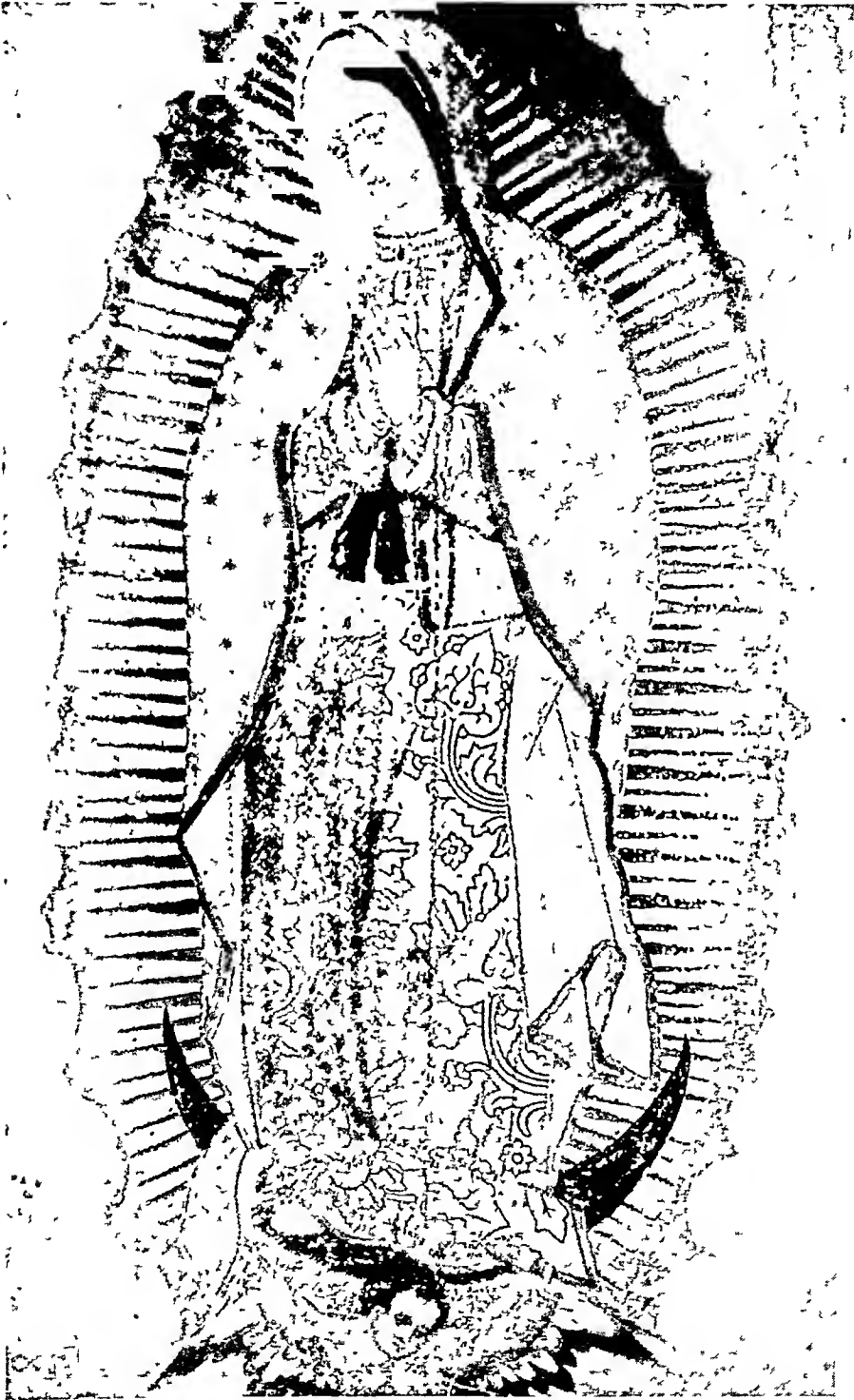
ANCIENT MAYAN TEMPLES AT CHICHEN-ITZA, YUCATÁN
(Courtesy, Pan American World Airways)



CATHOLIC CHURCH AT MITLA, OAXACA

This church rests on a foundation of pre-Columbian structure, observable in the lower right-hand portion of the church.
(Photo by author.)

PLATE XX



MEXICO'S PATRON SAINT: THE VIRGIN OF GUADALUPE
(Photograph by Von Stetten Courtesy of Fotocolor)



Brincando IN TEPOZTLÁN

Annual Fiesta Note elaborate costumes (Photo by D. Spencer Hatch)

PLATE XXII



INDIAN COSTUME FOR THE ANNUAL FEATHER DANCE IN OAXACA



SIX FORMER PRESIDENTS OF MEXICO UNITED WITH PRESIDENT AVILA CAMACHO ON SEPTEMBER 15, 1942, IN THE OBSERVANCE OF MEXICO'S INDEPENDENCE DAY, AS A SYMBOL OF NATIONAL UNIFICATION

From right to left: Adolfo de la Huerta, Emilio Portes Gil, Lázaro Cárdenas, Manuel Avila Camacho, Plutarco Elias Calles, Abelardo L. Rodriguez, Pascual Ortiz Rubio. (Photo from Three Lions.) (Independence Day is September 16, but celebration begins the previous day.)

